



An
Bord
Pleanála

Inspector's Report

ABP-318588-23

Development	Codling Wind Park, an offshore wind farm in the Irish Sea located at Codling Bank.
Location	Off the coast of County Wicklow, c.13-22km, between Greystones and Wicklow Town.
Prospective Applicant	Codling Wind Park Ltd (Joint Venture, Fred Olsen Seawind and EDF Renewables).
Coastal Planning Authorities	Wicklow County Council, Dún Laoghaire-Rathdown County Council and Dublin City Council.
Type of Application	Consultation under S287A of the Planning and Development Act 2000, as amended, for opinion on Design Flexibility
Date of Meeting	19 th December 2023
Date of Site Inspection	22 nd August 2023
Inspector	Deirdre MacGabhann

1.0 INTRODUCTION

- 1.1 This report relates to pre-application discussions held with Codling Wind park Ltd (CWP) in respect of an offshore wind farm, located in the Irish Sea, at Codling Bank, in relation to the prospective applicants request for an Opinion on Flexibility from the Board. The pre-consultation request was received by the Board on 4th December 2023.
- 1.2 This report describes the location and nature of the proposed development, the nature and extent of the flexibility requested, and the legal provisions which are relevant to the Board's consideration of flexibility for the proposed development.
- 1.3 The Board's representatives met with the prospective applicant on one occasion in relation to the requested Opinion on Flexibility. The presentation provided by the prospective applicant and written record of this meeting are on the file. This report should be read in conjunction with these. It is not proposed to repeat the contents of this record in detail here.
- 1.4 The Board's representatives also met with the prospective applicant on five occasions in relation to the proposed development under section 287 of the Planning and Development Act. The presentations provided by the prospective applicant and written records of these meetings are on the relevant files (ABP-315809-23).

2.0 SITE AND DESCRIPTION

- 2.1 The c.125km² offshore windfarm site is located c.13-22km off the County Wicklow, with Greystones situated to c.15km to the north west and Wicklow Town c.17km to the south west of the offshore wind farm boundary. It will be situated on Codling Bank, in water depths than range from c.9m to c.33m.
- 2.2 Land fall for the offshore transmission infrastructure is the southern side of the Poolbeg Peninsula, Dublin City. The onshore transmission infrastructure will be situated on land extending from the landfall site to the existing ESB Networks 220kV substation on the northern side of the peninsula, via a proposed onshore sub-station, located on the peninsula to the west of the existing substation (see drawings attached to Request document, dated 4th December 2023). Land uses

falling within the development area comprises a mix of public and private land, industrial land uses and derelict land.

- 2.3 The coastal landscape alongside the wind farm site, is a rural landscape situated between Greystones and Wicklow Town. It is predominantly low lying, with modest rural development. The shore is largely rocky and is separated from agricultural land by the Wicklow Town to Greystones railway line that runs along the coast.
- 2.4 European sites in the area of the wind farm site and offshore cable route include:
- The Murragh SPA and the Murragh Wetlands SAC stretching along the coast between Wicklow Town and Greystones.
 - Wicklow Head SPA, to the south east of Wicklow Town.
 - Wicklow Reef SAC, east of Wicklow Town.
 - Bray Head, SAC, to the south east of Bray Town.
 - Rockabill to Dalkey Island SAC, east of Dalkey.
 - Dalkey Islands SPA, off Dalkey.
 - South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC to the south of Poolbeg Peninsula.

3.0 PROPOSED DEVELOPMENT

- 3.1 Codling Wind Park (CWP) offshore windfarm project comprises 60-75 wind turbine generators (WTGs), with a maximum output of up to 1,450 megawatts, located between c.13km and 22km off the Irish coast at counties Wicklow, Dún Laoghaire-Rathdown and Dublin City. Whilst the final details of the development are to be confirmed, the prospective applicant has indicated that details are likely comprise/fall within the following parameters:

- **The Generating Station** - The generating station comprising 60 or 75 wind turbines (WTGs), with an overall tip height of 288m or 314m, an output of up to 1,450 megawatts and inter-array cables (IACs) and interconnector cabling linking the WTGs and offshore substation structures (OSSs).
- **Offshore Transmission Infrastructure (OfTI)** - Three off shore sub-station structures (OSS) and three off shore export cables transporting the energy produced from the OSS to land at the Poolbeg peninsula.

- **Landfall Infrastructure** – The landfall on the southern Poolbeg peninsula and the point at which the offshore export cables (part of the OfTI) are brought ashore and connected at three transition joint bays (TJBs) to the onshore export cables (part of the Onshore Transmission Infrastructure, OTI). The activities included in the scope of 'landfall', extending from c.4km offshore to the TJBs onshore are non-ducted and ducted cable, within the intertidal area, and landfall cable ducts from the intertidal area to the transition joint bays on shore.
- **Onshore Transmission Infrastructure (OTI)** – Also situated on the Poolbeg peninsula and comprising the onshore export cables, the onshore substation (northern side of the peninsula) and associated infrastructure and cable to connect the onshore substation to the planned extension to the existing ESB Networks 220kV substation on the Poolbeg peninsula (east of the onshore substation). The extension to the EirGrid sub-station forms part of wider grid upgrades planned by EirGrid.

4.0 REQUEST FOR AN OPINION ON FLEXIBILITY

4.1 Context

4.2 The Prospective Applicant entered into pre-application discussions with the Board under ABP-315809-23 with respect of the development of the Codling Bank Wind Park (CWP) offshore windfarm with a maximum of 75 WTGs, off the coast of Wicklow. Design flexibility has been provided for in the legislation in the case of applications in the maritime area. This is particularly in relation to the rapidly changing technology available in marine renewables, and the potentially long lead-in times between the making of a planning application and procurement of equipment. The prospective applicant has submitted a request to the Board for an Opinion on Flexibility in respect of the offshore windfarm, relative to a series of options and parameters that may be provided later for the Board's approval.

4.3 The Request Details

4.4 The request for a meeting with respect to seeking an Opinion on Flexibility was made under section 287A of the P&D Act, 2000 (as amended). The request was accompanied by:

- a. Table 287A, Table of Flexibility Sought, setting out the details or groups of details are unlikely to be confirmed at the time of the proposed application (Appendix 1),
- b. An explanation of the circumstances relating to the proposed development that indicate that it is appropriate that the application be made before certain details are confirmed (Appendix 2),
- c. Proposed Development Areas (location maps) (Appendix 3), and
- d. Site Layout Plans (Appendix 4). These include alternative layouts for 75 no. and 60 no. wind turbines.

4.5 The details or group of details for which flexibility is being sought are summarised below:

Aspect	Details/Groups of Details unlikely to be Confirmed	Options/Parameters
Generating Station	Number of turbines and foundations	Option A – 75 turbines. Option B – 60 turbines.
	Location of turbines and foundations	WTG layouts for Option A and Option B with limit of deviation (LOD) (100m around centre point of specified location).
	Dimensions of turbines	Different parameters for Options A and B, in terms of rotor diameter, hub height, tip height, tower diameter and blade chord.
	Dimensions of monopile foundations	Different parameters for Options A and B, in terms of height, diameter, length, embedment and grout volume.
	Scour protection (foundations)	Location as per number and location of wind turbine foundations, Options A and B and with LOD (100m of centre point).
	Scour protection (type)	Three options – Rock armour & filter layer, sandbags or rock-filled mesh bags.
	Horizontal alignment of IACs and interconnector cables	Specific alignment with 100m LOD either side of each cable (preferred alignment) and 200m around centre point of each turbine and off shore substation.
	Length of IACs on seabed.	Option A – 120km – 139km. Option B – 112km – 130km.
	Length of interconnector cables on seabed.	7.4km to 8.6km.

	Depth of IAC and interconnectors below seabed	0m to 1.5m
	IAC and interconnector cable protection (location)	Within same parameters and LOD for cable alignments.
	IAC and interconnector cable protection (type)	Four options rock placement, concrete mattresses or sandbags and rock-filled mesh bags.
	Length of IAC and interconnector cable requiring protection	29.8km Option A, 27.8km Option B.
Transmission component 1 – Offshore transmission Infrastructure	Offshore substations topside and monopile foundation (location)	Specific locations with 100m LOD around centre points.
	Offshore substation foundation - Dimensions	Different parameters for options A and B, in terms of diameter, length, embedment and grout volume.
	Offshore substation – Scour protection (location and type)	Location – Locations same as OSS monopiles, with 100m LOD. Type - Three options for protection, rock armour & filter layer, sandbags or rock-filled mesh bags.
	Horizontal alignment of offshore export cables	Specific alignments with an LOD of (1) 250m corridor either side of preferred alignment of each export cable within array site and (2) the offshore export cable corridor outside of the array site (LOD not indicated).
	Total length of offshore export cables	126.0-146.0km
	Depth of offshore export cables below seabed	0-3.5m
	Offshore export cable protection (location and type)	Location – Within same parameters as cable alignment. Type - Four options for protection, rock placement, concrete mattresses or sandbags and rock filled mesh bags.
Transmission component 2 - Landfall	Location of TJBs, link box chambers, access roads and reprofiled embankment	Specific locations with defined LOD boundary.
	Landfall cable ducts (and associated offshore export cables within ducts)	Horizontal alignment – Specific alignment within defined LOD boundary.
		Option 1 Open Cut:

		<ul style="list-style-type: none"> - Depth of landfall cable ducts below ground, 1m to 6m. - Requirement for temporary cofferdam. - Location of cofferdam - Specific location with defined LOD boundary.
		<p>Option 2 Trenchless Technique:</p> <ul style="list-style-type: none"> - Depth of landfall cable ducts below ground, 1m to 10m. - Length of landfall cable ducts of 80-120m (indicated only for Option 2 trenchless technique). - Requirement for temporary reception pits. - Location of temporary reception pits - Specific location with defined LOD represented by the offshore export cable corridor.
	Intertidal cable ducts (& associated export cables within ducts)	<p>Horizontal alignment - Specific alignments with an LOD represented by the offshore export cable corridor.</p> <p>Length – 160m to 300m (from end of landfall cable ducts to c.35m from HWM).</p>
	Intertidal offshore export cables (non-ducted element)	<p>Horizontal alignment - Specific alignments with an LOD represented by the offshore export cable corridor.</p> <p>Depth – 1m to 3m.</p> <p>Location of supporting structures (mid support pontoons, tensioner platform, rollers, equipment storage) - Specific alignments with an LOD represented by the offshore export cable corridor</p>
Transmission Component 3 – Onshore transmission infrastructure (OTI)	Onshore export cables	<p>Underground tunnel Option 1:</p> <ul style="list-style-type: none"> • Alignment – Specific alignment with defined LOD corridor. • Depth – 13m – 22m (ground level to top of tunnel). <p>Open cut option/HDD option:</p> <ul style="list-style-type: none"> • Alignment – Specific alignment with defined LOD corridor. • Depth – 0.9m to 10m (below ground level).
	Onshore substation (Location of onshore substation revetment perimeter structure)	Specific location with defined LOD for sheet piling at toe or revetment.
	ESBN network cables	<p>Horizontal alignment of ducts and network cables – Specific alignment with a defined LOD corridor.</p> <p>Open Cut Option 1:</p>

		<ul style="list-style-type: none"> Depth of ESN network cable ducts and associated cables – 0.9m to 3m below ground level. <p>Open Cut/HDD Construction Option 2:</p> <ul style="list-style-type: none"> Depth of ESN network cable ducts and associated cables - 0.9m to 10m (Open Cut/HDD construction).
	Construction compounds/laydown areas (location)	Construction compounds A and B - Specific location within a defined LOD.

4.6 The applicant provided an undertaking, in section 2 of the request letter (4th December 2023), to submit with the application in accordance with the detail or groups of details specified in the Opinion pursuant to section 287B(4)(a) as required under Article 4(1)(e) of the Planning and Development (Maritime Development) regulations 2023.

5.0 POLICY CONTEXT

5.1 This is set out in section 4.0 under ABP-315809-23.

6.0 MEETING HELD

6.1 One meeting was held with the prospective applicant's representatives on the 19th December 2023. Presentations were provided at the meeting and are included in the file together with other information provided to the Board in respect of same. The record of the meeting is also contained in the file. Issues raised at the meeting are identified and considered in Section 9 below.

7.0 LEGISLATIVE CONTEXT

7.1 Planning and Development, Maritime and Valuation (Amendment) Act 2022

7.2 This Act, in recognition that certain applications require a degree of flexibility, introduced amendments to the Planning and Development Act 2000 (as amended) and the Maritime Area Planning Act 2021, to facilitate procedures that will enable planning authorities and the Board to consider design flexibility as part of the assessment of planning applications.

7.3 Section 287A Planning and Development Act, 2000 (as amended)

7.4 This section of the Act sets out the requirements for requesting the Board to consider design flexibility, and the Board procedures for consideration of the request as part of the assessment of planning applications.

- **Section 287A (1)** states that a prospective applicant who proposes to make an application under section 291 may, before making such an application, request a meeting with the Board for the purpose of section 287B as part of consultations referred to in section 287(1).
- **Section 287A (2) (a-d)** lists the details required in the request (including site location map, brief project description and possible effects on the environment).

- **Section 287A (2) (e)** requires a description of -

(i) the details, or groups of details, of the proposed development that, owing to the circumstances set out in *subparagraph (ii)*, are unlikely to be confirmed at the time of the proposed application, and

(ii) the circumstances relating to the proposed development, including such circumstances as the Minister may prescribe in relation to any class or description of development for the purposes of this subparagraph, that indicate that it is appropriate that the proposed application be made and decided before the prospective applicant has confirmed the details referred to in subparagraph (i) in particular, whether the prospective applicant may be able to avail of technology available after making the proposed application that is more effective or more efficient than that available at the time of the application,

- **Section 287A (2) (f)** requires an undertaking to provide with the proposed application either—

(i) two or more options in respect of each detail or group of details referred to in *paragraph (e)(i)*, containing information on the basis of which the proposed application may be made and decided,

(ii) parameters within which each detail referred to in *paragraph (e)(i)* will fall and on the basis of which the proposed application may be made or decided, or (iii) a combination of *subparagraphs (i)* and *(ii)*,

- **Section 287A (2) (g-h)** lists other information that may be provided or prescribed.
- **Section 287A (3)** provides for the Board shall convene a meeting.
- **Section 287A (4)** provides for the Minister to make regulations in relation to procedures and administration for the purposes of holding a meeting.

7.5 Circular Letter MPP 01/2023 – An Opinion on Design Flexibility for Marine Development

7.6 This document seeks to assist the Board in the application of the provisions for an opinion on design flexibility for maritime development. It states that when requesting an opinion on flexibility, the applicant must include a description of:

- The details of the proposed development that are unlikely to be confirmed at the time of the proposed application, and
- The circumstances relating to the proposed development that indicate that it may be considered appropriate that the proposed application be made and decided before the final details are confirmed.

7.7 It notes that particular importance in the offshore wind energy context is whether the prospective applicant may be able to avail of technology that is more effective or more efficient than that available at the time of the application.

7.8 When requesting a meeting under section 287A, the applicant is required to provide an undertaking to include the information set out under section 287A (2)(e)(i) as part of the application on the basis of which the proposed application may be assessed and decided. An opinion pursuant to section 287B (2) on design flexibility should only be provided where it is reasonable and justified.

7.9 Circular Letter PL11/2023 – New Design Flexibility Provisions with regard to certain unconfirmed details as part of application for planning permission

7.10 This document refers to the opinion on flexibility which developers may wish to avail of. It notes that applicants may wish to seek permission before certain details of the

proposed development are confirmed. It provides an example of a windfarm and notes that details such as the precise height or blade length of a turbine or the precise grid connection point and route may not be confirmed at the time of application. In addition, it notes that the process is not intended to apply to points of detail generally dealt with by way of compliance condition and agreed between the applicant and the Board post-consent.

- 7.11 The document states that the applicant must set out the circumstances why it would be appropriate for the proposed application to be made and decided before the details are confirmed. It provides that a separate meeting may take place to discuss the flexibility request as part of the existing pre-application arrangements. It also states that existing consultations which may take place in advance of the flexible meeting request may concern the scope of details not likely to be confirmed at application stage and likely to be subject to a request for an opinion on unconfirmed details.
- 7.12 It further provides for matters of public notification and transparency in respect of the new arrangements and prescribes the forms to be used for the various stages of the process - flexible meeting request; opinion on unconfirmed details issued by the Board; and supplementary statement of unconfirmed details to accompany a planning application.

8.0 PRE-APPLICATION REQUESTS

- 8.1 Refer to section 7.0 of ABP-315809-23 for a detailed description of the concurrent marine related pre-application consultations, including requests under S287A.

9.0 CONSIDERATION OF REQUEST

9.1 Context

- 9.2 The request for a meeting with respect to seeking an Opinion on Flexibility was made under section 287A of the P&D Act, 2000 (as amended), and details of the accompanying documentation is summarised in section 4.0 above.
- 9.3 The application contained the following information:

- a. The details, or groups of details, of the proposed development that may be confirmed after the proposed application has been made and decided.
- b. The circumstances relating to the proposed development that indicate that it is appropriate that the proposed application be made and decided before the prospective applicant has confirmed the details referred to in (a) above.

9.4 Consideration of request

9.5 Essentially the applicant is seeking flexibility with regard to turbine size, with this directly influencing the number and layout of turbines. Size of turbine also influences size of foundations and alternative layouts influence the extent of inter array, interconnector and export cabling. Flexibility is also sought by way of limits of deviation around specific alignments and/or locations and in respect of extent and type of scour protection (foundations and cables). The applicant is also seeking flexibility in respect of the temporary and permanent infrastructure associated with different construction methodologies, which arise by virtue of the marine environment or due to particular issues affecting the terrestrial context for the development. These details are set out in full in the applicant's correspondence to the board date 4th December 2023 (in particular in Appendix 2 to the submission).

9.6 In summary, the applicant states that all of the flexibility sought by CWPL is justified by:

- The prospect of more effective or efficient technology becoming available after the application is made e.g. in respect of wind turbine design and consequential changes to layout,
- The inevitable changes that will occur in the marine environment after the date of application and grant of permission e.g. cable alignments, which must respond to unexploded ordnance that may be swept into the development site and biogenic reef that can generate on the seabed, and
- For a small number of details, the impossibility of completing detailed ground investigations, with the occurrence of Japanese Knotweed on the subject site, without jeopardising the delivery of the CWP in time to contribute to Ireland's

2030 decarbonisation targets e.g. whether or not the grid connection across Poolbeg peninsula will be delivered in a tunnel or a trench.

9.7 Of note, the applicant argues that whilst the Planning and Development Act 2000, as amended, and government guidelines refer to the ability of the applicant to avail of technology available after making the proposed application, to justify flexibility, the set of circumstances justifying details or groups of details to be left unconfirmed cannot be exclusively limited to improvements in technology.

9.8 I set out below my consideration of the details unlikely to be confirmed at the time of the proposed application and my recommendation in respect of whether or not to accept the request for flexibility.

Details/Groups of Details unlikely to be Confirmed	Options/Parameters	Accept Flexibility	Consideration
Aspect: Generating Station			
Number of turbines and foundations	Option A – 75 turbines. Option B – 60 turbines.	Yes	CWPL is seeking limited flexibility on size and therefore <u>number of turbines</u> , largely based on the technology available. The size and number of turbines, has a knock on effect on the <u>layout</u> (Options A and B), and <u>location and dimensions of foundations</u> (of turbines and substations) and <u>length of cabling</u> (IACs and interconnectors). I am satisfied therefore that it is reasonable for these aspects to be included as matters of flexibility. The protection of <u>foundation and sub-sea cables</u> and the level of <u>burial</u> of sub-sea cables relate to normal construction practices at sea for offshore wind farms. Options related to standard construction practice that may not be clarified at the application stage should be set out and assessed in the application documentation (including in the EIAR & NIS) and should, in the event of favourable consideration, be made subject to a compliance condition which would include the agreement of a Construction and Environmental Management Plan. This approach is supported by several legal judgements
Location of turbines and foundations	WTG layouts for Option A and Option B with limit of deviation (LOD) (100m around centre point of specified location).	Yes	
Dimensions of turbines	Different parameters for options A and B, in terms of rotor diameter, hub height, tip height, tower diameter and blade chord.	Yes	
Dimensions of monopile foundations	Different parameters for options A and B, in terms of height, diameter, length, embedment and grout volume.	Yes	
Scour protection (foundations)	Location as per number and location of wind turbine foundations, for Options A and B and with LOD (100m of centre point).	No	
Scour protection type	Three options – Rock armour & filter layer,	No	

	sandbags or rock-filled mesh.		(incl. Alen Buckley v ABP & Boland v ABP) and legal advice to the Board.
Horizontal alignment of IACs and interconnector cables	Specific alignment with 100m LOD either side of each cable (preferred alignment) and 200m around centre point of each turbine and off shore substation.	Yes	Flexibility is also sought in respect of <u>location of turbines and horizontal alignment of the IACs and interconnectors</u> . Limits of deviations are proposed as the applicant is not able to exclude the risk that the specified locations will be unsuitable for turbines/cable installation due to hitherto undiscovered seabed conditions (e.g. unexpected bedrock/large boulders), or changes in seabed conditions (e.g. generation of biogenic reef or intrusion of mobile UXO) after the application date. These assertions are not unreasonable having regard to the dynamic nature of the marine environment. I am satisfied, therefore, that for these aspects of the development flexibility is acceptable.
Length of IACs on seabed.	Option A – 120km – 139km. Option B – 112km – 130km.	Yes	
Length of interconnector cables on seabed.	7.4km to 8.6km.	Yes	
Depth of IAC and interconnectors below seabed	0m to 1.5m	No	
IAC and interconnector cable protection (location)	Within same parameters and LOD for cable alignments.	No	
IAC and interconnector cable protection (type)	Four options rock placement, concrete mattresses or sandbags and rock-filled mesh bags.	No	
Length of IAC and interconnector cable requiring protection	29.8km Option A, 27.8km Option B.	No	
Transmission component 1 – Offshore transmission Infrastructure			
Offshore substations topside and monopile foundation (location)	Specific locations with 100m LOD around centre points.	Yes	The applicant has stated that there is a high degree of confidence as to the location of the three proposed off shore sub-stations. However, as stated above the <u>location of the offshore sub-stations</u> may also be influenced by undiscovered seabed conditions or changing conditions after the date of application. I consider, therefore, that it is acceptable that a LOD is provided around the location of the proposed offshore substations and <u>associated foundations</u> . To enable efficiencies in the procurement, transportation and installation of OSS monopiles, it is proposed to use monopiles with the same dimension as the selected wind turbine monopiles.
Offshore substation foundation - Dimensions	Different parameters for options A and B, in terms of diameter, length, embedment and grout volume.	Yes	
Offshore substation – Scour protection (location and type)	Location -Specific locations same as OSS monopiles, with 100m LOD. Type - Three options for protection, rock armour & filter layer, sandbags or rock-filled mesh bags.	No	

Horizontal alignment of offshore export cables	Specific alignments with an LOD of (1) 250m corridor either side of preferred alignment of each export cable within array site and (2) the offshore export cable corridor outside of the array site (LOD not indicated).	Yes	<p>Consequently, two options are put forward for the <u>dimensions of offshore substation foundations</u>, reflecting the different size of foundations associated with Options A and B. This approach seems reasonable and is acceptable.</p> <p>The prospective applicant also seeks flexibility in respect of the <u>horizontal alignment of the offshore export cable</u>, either side of a preferred alignment, and overall <u>length</u> (which is influenced by alignment). Given the potential for undiscovered seabed conditions (e.g. large boulders, undiscovered archaeological remains) or changes in seabed conditions (e.g. intrusion of unexploded remains, generation of biogenic reef), flexibility of location within a defined LOD and length, within defined parameters, is acceptable.</p> <p>With regard to <u>sub-sea cable protection and depth of cables</u>, this relates to normal construction practices at sea for offshore wind farms. Options related to standard construction practice that may not be clarified at the application stage should be set out and assessed in the application documentation (including in the EIAR & NIS) and should, in the event of favourable consideration, be made subject to a compliance condition which would include the agreement of a Construction and Environmental Management Plan. This approach is supported by several legal judgements (incl. Alen Buckley v ABP & Boland v ABP) and legal advice to the Board.</p>
Total length of offshore export cables	126.0-146.0km	Yes	
Depth of offshore export cables below seabed	0-3.5m	No	
Offshore export cable protection (location and type)	<p>Location – Within same parameters as cable alignment.</p> <p>Type - Four options for protection, rock placement, concrete mattresses or sandbags and rock filled mesh bags.</p>	No	
Transmission component 2 - Landfall			
Location of TJBs, link box chambers, access roads and reprofiled embankment	Specific locations with defined LOD boundary.	Yes	<p>The offshore export cables will be joined to the onshore export cables by underground transition joint bays. The applicant states that there is a high degree of confidence regarding the <u>location of the TJBs</u>, and that a specific location will be sought with an LOD around each TJB to respond to localised and unknown ground conditions. This approach seems reasonable, given that the TJBs form the interface between</p>
Landfall cable ducts (and associated offshore export cables within ducts).	Horizontal alignment – Specific alignment within defined LOD boundary.	Yes	
	Option 1 Open Cut:	No	

	<ul style="list-style-type: none"> Depth of landfall cable ducts below ground, 1m to 6m. Requirement for temporary cofferdam. Location of cofferdam - Specific location with defined LOD boundary. 		<p>marine and terrestrial environments and may be influenced by the locational risk posed by the marine environment (as discussed above), and is acceptable.</p> <p>Cable ducts will be installed at landfall (transition from marine to terrestrial environment) to protect the offshore export cables as they pass from the marine environment to the TJBs.</p>
	<p>Option 2 Trenchless Technique:</p> <ul style="list-style-type: none"> Depth of landfall cable ducts below ground, 1m to 10m. Length of landfall cable ducts of 80-120m (indicated only for Option 2 trenchless technique). Requirement for temporary reception pits. Location of temporary reception pits - Specific location with defined LOD represented by the offshore export cable corridor. 	No	<p><u>Horizontal alignment of landfall cable ducts</u> will be linked to the location of TJBs, which will be subject to LOD. It is reasonable therefore that the horizontal alignment of cable ducts will be subject to similar flexibility.</p> <p>Landfall cable ducts will be installed using <u>open cut or trenchless techniques</u>. The applicant accepts that the different installation options are construction methods and are outside the scope of section 287A. However, it is argued that as the different methods may require different and substantial temporary structures (<u>cofferdam or temporary reception pits</u>) which will remain in-situ over longer periods of time, these are required to be subject to section 287A and are therefore part of the request.</p>
Intertidal cable ducts (& associated export cables within ducts)	<p>Horizontal alignment - Specific alignments with an LOD represented by the offshore export cable corridor.</p> <p>Length - 160m to 300m from end of landfall cable ducts to c.35m from HWM).</p>	Yes	<p>In order to determine the installation techniques, the prospective applicant states (i) Japanese Knotweed is present along the southern embankment of the Poolbeg Peninsula at the land fall location, presenting a legitimate time constraint for the development (i.e. the MAC for the development requires that an application for permission be submitted within 18 months of the commencement date of 23rd December 2022), and (ii) that more detailed site investigations will be carried out by the Tier 1 contractor who will not be appointed for some time, given the long lead in time and complexity of offshore wind farms.</p>
Intertidal offshore export cables (non-ducted element)	<p>Horizontal alignment - Specific alignments with an LOD represented by the offshore export cable corridor.</p>	Yes	
	Depth – 1m to 3m.	No	

	<p>Location of supporting structures (mid support pontoons, tensioner platforms, rollers, equipment storage) - Specific alignments with an LOD represented by the offshore export cable corridor</p>	No	<p>I am mindful of the above arguments put forward by the applicant. However, the government's circular on Design Flexibility for Maritime Development (Circular MPP 01/2023) references the need for flexibility due to technological developments, the complex nature of offshore wind development, the opportunity to avail of technology that is more effective or efficient and emerging technologies. In this instance, flexibility is sought in respect of temporary infrastructure associated with different construction methods, with the construction method to be ultimately selected based on further site investigations. I am not satisfied therefore that the flexibility sought in terms of temporary construction infrastructure, albeit substantial and located in a sensitive environment, is consistent with the government's guidelines. In contrast, I consider that these elements of the project comprise options related to standard construction practice. As stated previously, such practices which are not clarified at the application stage should be set out and assessed in the application documentation (including in the EIAR & NIS) and should, in the event of favourable consideration, be made subject to a compliance condition which would include the agreement of a Construction and Environmental Management Plan. This approach is supported by several legal judgements (incl. Alen Buckley v ABP & Boland v ABP) and legal advice to the Board.</p> <p>For the same reasons, I do not consider that the provision and location of substantial temporary <u>supporting structures</u> for the installation of offshore export cables, would fall within the government's guidelines for design flexibility.</p> <p><u>Horizontal alignment of intertidal cable ducts and intertidal offshore export cables</u> will be subject to the same risks as offshore cables. I consider therefore that flexibility is acceptable i.e. specified alignment with LOD.</p>
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			<p><u>Length of intertidal cable ducts</u>, will depend on the distance over which landfall cable ducts have been installed, which will in turn depend on construction method and need to pass beyond existing utilities in the intertidal area (paragraph 3.3.2, Appendix 2). I consider therefore that this (length), and the <u>depth of cables</u> (as discussed above), relate to normal construction practices at sea for offshore wind farms and should be addressed accordingly in the application documents.</p>
Transmission Component 3 – Onshore transmission infrastructure (OTI)			
Onshore export cables	<p>Underground tunnel Option 1:</p> <ul style="list-style-type: none"> Alignment – Specific alignment with defined LOD corridor. Depth – 13m – 22m (ground level to top of tunnel). <p>Open cut option/HDD option 2:</p> <ul style="list-style-type: none"> Alignment – Specific alignment with defined LOD corridor. Depth – 0.9m to 10m (below ground level). 	No	<p>The prospective applicant indicates (section 4, Appendix 2) that onshore cable ducting from the TJBs to the onshore substation will take place via an underground tunnel or by open cut and HDD methodology. The requirement for two options is due to concerns regarding uncertainties that exist along the cable route in relation to ground conditions and the extent of existing utilities within roads and routes proposed and the need for further intrusive investigations. Further investigations will be carried out by the appointed Tier 1 contractor who will establish the most suitable installation technique.</p> <p>The applicant acknowledges that the installation options are construction methods. However, again the applicant considers that as the different methods require different temporary structures, these are required to be subject to section 287A.</p> <p>In considering this issue, I am mindful of the particular density of development and utilities in the Poolbeg Peninsula. However, this is not unusual in an urban environment and the different approaches to construction would not typically fall within the flexibility provided under section 287A, and as further detailed in Circular MPP 01/2023 as they are simply construction options for different ground conditions and should properly be set out and assessed application, including in the EIAR & NIS, and if relevant subject to a</p>

			<p>compliance condition (as discussed above).</p> <p>Notwithstanding this, the Board may wish to reconsider this conclusion as the permanent infrastructure, which will remain as a consequence of alternative construction methods, will differ significantly, notably the potential for a permanent and large scale tunnel.</p>
Onshore substation (Location of onshore substation revetment perimeter structure)	Specific location with defined LOD for sheet piling at toe or revetment.	Yes	<p>The prospective applicant proposes revetments (a retaining wall) along the northwest and western boundary of the onshore substation site (CWP substation), by way of sheet piling at the toe of the revetment. The primary function of the revetments is to provide coastal protection for the onshore substation by preventing potential impacts on the slopes from erosion and scour. Limited locational flexibility will be sought within a defined LOD due to the dynamic nature of the River Liffey, which may influence the final required extent of revetment and which will be informed by up to date bathymetric survey prior to construction.</p> <p>Given the potential dynamic nature of the marine environment and the proposal to site the revetment in a defined LOD, I consider that this approach is reasonable and falls within the guidelines on design flexibility.</p>
ESBN network cables	Horizontal alignment of ducts and network cables – Specific alignment with a defined LOD corridor.	No	<p>The applicant states that the development will connect to EirGrid's proposed new substation adjacent to the existing substation at Poolbeg. The design of the proposed substation is at an early stage and means of connection to it are under consideration. The prospective applicant therefore proposes a LOD for the horizontal alignment of the cables connecting the development substation to EirGrid's.</p> <p>As the proposed horizontal alignment of the grid connection route is currently subject to detailed design and is not unclear by virtue of technology or the complexity of the marine environment/off shore wind farms, it does not fall within the</p>

			<p>government's guidelines on design flexibility.</p> <p>Notwithstanding this, any construction details which are which are not clarified at the application stage, should be fully set out and assessed in the application (including in the EIAR & NIS) and, if necessary, be subject to a compliance condition to include the agreement of a Construction Environmental Management Plan.</p>
	<p>Open Cut Option 1:</p> <ul style="list-style-type: none"> Depth of ESBN network cable ducts and associated cables – 0.9m to 3m below ground level. <p>Open Cut/HDD Construction Option 2:</p> <ul style="list-style-type: none"> Depth of ESBN network cable ducts and associated cables - 0.9m to 10m (Open Cut/HDD construction). 	No	<p>Two options are proposed for construction of the ESBN network cables via a mix of open cut and open cut/HDD construction.</p> <p>These two matters are essentially construction details that under normal circumstances could be addressed by way of compliance condition post consent. Neither is driven by any change in technology, by virtue of the particular nature of the marine environment, or result in significantly different permanent structures. I consider that these matters should not therefore form part of design flexibility.</p> <p>Again such details should be set out and assessed in the application (including in the EIAR & NIS) and, if necessary, be subject to a compliance condition.</p>
Construction compounds/laydown areas (location)	Construction compounds A and B - Specific location within a defined LOD.	No	<p>The prospective applicant is in negotiations with the landowner, Dublin Port Company, regarding the size and location of construction compounds A and B, with DPC having competing commercial demands on the areas due to other proposed developments.</p> <p>Again the location of these compounds are essentially construction details which can be set out and addressed in the application (including in the EIAR & NIS) and be subject to a compliance condition, if necessary, and should not form part of design flexibility.</p>

10.0 CONCLUSION

10.1 Following the completion of the section 287A meeting on the 19th December 2023, and having regard to the information provided by the applicant in relation to the request for flexibility and to the circumstances which support this request, and based on my consideration of the applicant's request for flexibility, as set out above, I consider it reasonable that the following details / groups of details of the proposed development, may be confirmed after the proposed application has been made and decided by the Board:-

Aspect	Details/Groups of Details unlikely to be Confirmed	Options/Parameters
Generating Station	Number of turbines and turbine foundations	Two options, A and B.
	Location of turbines and foundations	WTG layout options for Options A and B with identified limit of deviation (LOD) around centre point.
	Dimensions of turbines	Different parameters for Options A and B, in terms of rotor diameter, hub height, tip height, tower diameter and blade chord.
	Dimensions of monopile foundations	Different parameters for Options A and B, in terms of height, diameter, length, embedment and grout volume.
	Horizontal alignment of IACs and interconnector cables	Specific alignment with defined LOD.
	Length of IACs on seabed.	Within defined parameters (length).
	Length of interconnector cables on seabed.	Within defined parameters (length).
Transmission component 1 – Offshore transmission Infrastructure	Offshore substations topside and monopile foundations (location)	Specific location with defined LOD around centre points.
	Offshore substation foundations - dimensions	Different parameters for Options A and B, in terms of diameter, length, embedment and grout volume.
	Horizontal alignment of offshore export cables	Specific alignment with defined LOD

	Total length of export cable.	Within defined parameters.
Transmission component 2 - Landfall	Location of TJBs, link box chambers, access roads and reprofiled embankment	Specific locations with defined LOD boundary.
	Horizontal alignment of landfall cable ducts.	Specific alignment with defined LOD boundary.
	Intertidal cable ducts (& associated export cables within ducts)	Specific horizontal alignment with defined LOD. Length within defined parameters.
	Intertidal offshore export cables (non-ducted element)	Specific horizontal alignment with defined LOD.
Transmission Component 3 – Onshore transmission infrastructure (OTI)	Onshore substation	Specific location of revetment with defined LOD.

10.2 For each of the detail or group of details listed above, the prospective applicant shall provide with the proposed application two or more options in respect of each detail or group of detail and / or parameters within which each of the detail or group of details will fall.

10.3 For clarity, the following details do not fall to be considered under section 287A and are not included in this opinion:

- Construction options for scour protection (foundations and sub-sea cables).
- Construction parameters for depth of sub-sea cables.
- Construction options for landfall cable ducts, onshore export cables and ESNB network cables.
- Location of temporary construction compounds.

10.4 These elements of the development relate to normal construction practices and are intrinsic to the installation of the development. Options related to construction practice that may not be clarified at application stage, should be fully set out and addressed in the application documentation (including the EIAR and NIS) and in the event of a favourable decision on the application, construction related

methodologies could be agreed prior to commencement of development, by way of compliance with a planning condition.

11.0 RECOMMENDATION

I recommend that the following details / groups of details, of the proposed development, as set out above may be confirmed after the proposed application has been made and decided by the Board. The Board should notify the prospective applicant of its Opinion in respect of flexibility under the section 287A/B of the Planning and Development Act, 2000 (as amended), in accordance with the following Draft Order.

Professional Declaration

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.



Deirdre MacGabhann

Inspectorate

28th January 2024

DRAFT OPINION

1) An Bord Pleanála Opinion on flexibility

2) Request for meeting

Request under section 287A of the Act:	Design flexibility.
Request reference Number:	ABP-318588-23
Name of the requestor/ prospective applicant:	Codling Wind Park Ltd.
Location, townland or postal address of the land or structure to which the application relates (as may be appropriate):	Off the coast of County Wicklow (c.13-22km) between Greystones and Wicklow Town.
Nature and extent of the proposed development:	Offshore wind farm with up to 75 wind turbines.
Date of receipt of the request:	4 th December 2023.
Opinion Reference Number:	ABP-318588
Date of Opinion:	

3) Was the following Information included where relevant, with the Flexibility Meeting Request under section 287A of the Planning and Development Act 2000, as amended and the Planning and Development Regulations 2001, as amended.

Information	Enclosed with Request		
(a) A site location map sufficient to identify the maritime area/land on which the	Yes: [<input checked="" type="checkbox"/>]	No: [<input type="checkbox"/>]	

proposed development would be situated.			
(b) A brief description of the nature and purpose of the proposed development and of its possible effects on the environment.	Yes: [<input checked="" type="checkbox"/>]	No: [<input type="checkbox"/>]	When read in conjunction with pre-app case 315809.
(c) A draft layout plan of the proposed development.	Yes: [<input checked="" type="checkbox"/>]	No: [<input type="checkbox"/>]	
(d) A description of the details, or groups of details, of the proposed development that, owing to the circumstances set out in (e) below, are unlikely to be confirmed at the time of the proposed application.	Yes: [<input checked="" type="checkbox"/>]	No: [<input type="checkbox"/>]	
(e) A description of the circumstances relating to the proposed development that indicate that it is appropriate that the proposed application be made and decided, before the prospective applicant has confirmed the details referred to in (d) above.	Yes: [<input checked="" type="checkbox"/>]	No: [<input type="checkbox"/>]	
(f) An undertaking to provide with the proposed application, either - i. two or more options, in respect of each detail or group of details referred to in (d) above containing information on the basis of which	Yes: [<input checked="" type="checkbox"/>]	No: [<input type="checkbox"/>]	

<p>the proposed application may be made and decided,</p> <p>ii. parameters within which each detail referred to in paragraph (d) above will fall and on the basis of which the proposed application may be made and decided, or</p> <p>iii. a combination of (i) and (ii).</p>			
(g) Such other information, drawings or representations as the prospective applicant may wish to provide or make available.	<p>Yes:</p> <p>[<input checked="" type="checkbox"/>]</p>	<p>No:</p> <p>[]</p>	<p>N/A:</p> <p>[]</p>
(h) The appropriate fee.	<p>Yes:</p> <p>[]</p>	<p>No:</p> <p>[]</p>	<p>N/A:</p> <p>[<input checked="" type="checkbox"/>]</p>

4) Opinion of the Board under section 287B of the Planning and Development Act 2000, as amended and the Planning and Development Regulations 2001, as amended.

Information	Details/ Circumstances
a) The details, or groups of details, of the proposed development that may be confirmed after the proposed application has been made and decided.	<p>Generating Station:</p> <ul style="list-style-type: none"> • Number of turbines (two options). • Location of turbines and foundations, with defined LOD. • Dimensions of turbines in respect of hub height, tip height, tower diameter and blade chord. • Dimensions of foundations in respect of height, diameter, length, embedment and grout volume.

	<ul style="list-style-type: none"> • IAC, interconnector and offshore export cable alignment with defined LOD and defined parameters for length. <p>Transmission component 1 – Offshore transmission infrastructure</p> <ul style="list-style-type: none"> • Location of offshore substations topside and foundations with defined LOD. • Dimensions of offshore substation foundations with defined parameters for height, diameter, length, embedment and grout volume. • Horizontal alignment of offshore export cable within and outside of array, with defined LOD. • Length of offshore export cable within defined parameters. <p>Transmission component 2 - Landfall</p> <ul style="list-style-type: none"> • Location of TJBs within defined LOD. • Horizontal alignment of landfall cable ducts, intertidal cable ducts and intertidal offshore cables (non-ducted element), with defined LOD. <p>Transmission component 3 – Onshore transmission infrastructure</p> <ul style="list-style-type: none"> • Location of onshore substation revetment with defined LOD.
b) The circumstances relating to the proposed development that indicate that it is appropriate that the proposed application be made and decided before the prospective applicant has confirmed the details referred to in paragraph (a) above.	To avail of more effective or efficient technology becoming available after the application, in respect of wind turbine design and consequential changes to layouts.

For each detail, or groups of details, referred to in paragraph 4(a) above, the proposed application shall, in addition to any other requirement imposed by or under the Planning and Development Act 2000, be accompanied by the information referred to in the undertaking submitted with the flexibility meeting request under section, 287A(2)(f) of the Planning and Development Act 2000.

The proposed application must be consistent with the opinion provided in accordance with section 287B of the Act.

The Board decided not to accept the request for design flexibility for construction options for scour protection, the extent and nature of the protection for foundations and subsea cable, construction options for landfall cable ducts, onshore export cables and ESB network cables and location of temporary construction compounds associated with the proposed development, as the Board considered that these elements of the proposed development relate to normal construction practices that are intrinsic to the installation of the development. Options related to construction practice that may not be clarified at application stage, should be set out and assessed in the application documentation (including the EIAR and NIS) and in the event of a favourable decision on the application, construction related methodologies could be agreed prior to commencement of development, by way of compliance with a planning condition.