

Volume 2 - Introductory Chapters

Chapter 6

Description of the Proposed Development – Offshore

Contents

6.	Description of the Proposed Development – Offshore	6.1
6.1	Overview of proposed development	6.3
6.2	Overview of Offshore Infrastructure	6.3
6.3	Offshore Wind Turbine Generators (WTGs)	6.4
6.4	Offshore Substation Platform (OSP)	6.6
6.5	Substructures and Foundations	6.8
6.6	Offshore Inter-Array Cables	6.11
6.7	Offshore Export Cables	6.11
6.8	Navigation, Colour, Marking and Lighting	6.11
6.9	Landfall Site	6.11
6.10	Operation and Maintenance	6.12
6.11	Decommissioning	6.12
6.12	References	6.13

Tables

Table A6.1: High Level Overview of the two Project Options for the proposed development (Replacing Table 6.2 of the 2024 EIAR)	6.4
Table A6.2 WTG Design Parameters (Replacing Table 6.3 of the 2024 EIAR)	6.5
Table A6.3 OSP Design Parameters for Project Option 1 and Project Option 2 (Replacing Table 6.4 of the 2024 EIAR)	6.7
Table A6.4 Jacket Design Parameters (Replacing Table 6.7 of the 2024 EIAR)	6.9
Table A6.5 Indicative Material Quantities with Jackets and TP (Replacing Table 6.8 of the 2024 EIAR)	6.10
Table A6.6 Indicative Scour Protection Area (Replacing Table 6.9 of the 2024 EIAR)	6.11

Images

Image A6.1 Infrastructure of the proposed development – not to scale (Source: Arup) (Replacing Image 6.2 of the 2024 EIAR)	6.3
Image A6.2 Typical WTG on a Jacket foundation (Source: CIP) (Replacing Image 6.6 of the 2024 EIAR)	6.9

6. Description of the Proposed Development – Offshore

North Irish Sea Array Windfarm Ltd (NISA, hereafter referred to as ‘the Developer’) has been considering the Request for Further Information (RFI) issued by An Bord Pleanála (now An Coimisiún Pleanála) as well as the third-party submissions received following public consultation. At An Coimisiún Pleanála’s behest, the Developer has also continued to consult with stakeholders in respect of the 2024 planning application throughout 2024-2026. The Developer has refined elements of the design to respond to the third-party submissions, the continued public and stakeholder consultation and the RFI (further details on the design refinements are provided in Appendix A5.1: Design Refinements). Amendments are therefore required to Chapter 6: Description – Offshore of the 2024 Environmental Impact Assessment Report (EIAR). Full details of consultation undertaken can be found in Appendix A1.2 in the Addendum to the EIAR.

For the purposes of clarity, this document shall be read in conjunction with the Chapter 6 submitted as part of the 2024 EIAR.

Any cross reference to a chapter, section, table, image, figure or appendix within this document is to another location within the Addendum to the EIAR unless explicitly stated otherwise. Any cross reference to anything included in the 2024 EIAR will be clearly labelled as such.

Text in bold is only used throughout this document to indicate where changes are required, and why they are required. Text in italics is text from a section of the 2024 EIAR which is deleted, or quotations from other documents (as explicitly stated). Replacement text is in normal font.

Tables and images which have been updated from the 2024 EIAR, or entirely new tables or images, have been included in the Addendum to the EIAR. These can be identified by the “A” prefix in the caption. Any changes within the updated table, in comparison to tables within the 2024 EIAR, are indicated by grey shading in the relevant cell, column or row, as necessary. The exception here is where a table has been replaced in its entirety.

The sections relevant to Chapter 6 in the RFI are included below.

RFI Section	RFI	Relevance to Chapter
1 (b)	The scientific information provided as part of the planning application documentation should be based on up-to-date survey reports and data. Accordingly, the applicant is requested to confirm/provide justification/verification that the information submitted in support of the planning application remains relevant and appropriate at the point of submitting further information or to update same as required.	The timeframes associated with the RFI have necessitated a review of the datasets previously used in the 2024 EIAR to ensure any necessary updates to the baseline environment are captured. Therefore, a review has been undertaken to comply with RFI 1 (b). The update to this chapter in relation to this, is provided in Section 6.12.
2 (a)	The Irish Coast Guard (IRCG), through the Department of Transport, has raised concerns in relation to the layout of the proposed development with respect to search-and-rescue (SAR) access. The applicant is requested to consult with the IRCG, in addressing these concerns, and provide further information and clarification on such matters.	The Developer participated in further consultation with the IRCG in 2025 and 2026. Following this consultation, a revised layout has been prepared for Project Option 1 and Project Option 2 which addresses the concerns raised by the IRCG. Further information on this consultation is included in Appendix A1.2. The update to this chapter in relation to this, is provided in Sections 6.2, 6.3, 6.4.
2 (b)	The EIAR under Chapter 17, Shipping and Navigation, states that as part of embedded mitigation, the fixed layouts for Project Option 1 and Project Option 2 comply with MGN 654 requirements (UK guidance, Maritime and Coastguard Agency, 2021). The applicant is advised that the Department of Transport Marine Survey Office (MSO) states that the proposed layout does not comply with guidance provided in MGN 654 and the	The Developer participated in further consultation with the MSO in in 2025 and 2026. Following this consultation, a revised layout has been prepared for Project Option 1 and Project Option 2 which extend the structure exclusion zone a further distance from Rockabill (from 3 NM to 3.06 NM) and removing WTGs in the south eastern

RFI Section	RFI	Relevance to Chapter
	<p>MSO strongly disagrees with the summarisation of the risk to the safety of navigation posed to commercial shipping, fishing vessels, and recreational craft transiting in proximity to the southeastern corner and the Rockabill GAP.</p> <p>The applicant is requested to consult with the Department of Transport MSO in addressing these concerns and provide further information and clarification on such matters.</p>	<p>corner which addresses the concerns raised by the MSO.</p> <p>Further information on this consultation is included in Appendix A1.2. The update to this chapter in relation to this, is provided in Section 6.3.</p>
6	<p>The Board notes that a number of observations have raised concerns in relation to the assessment of site alternatives and suitability of the site for development having regard to the location of the site within the recently designated North-west Irish Sea (NWIS) cSPA.</p> <p>Having regard to:</p> <ul style="list-style-type: none"> the recent designation of the North-west Irish Sea cSPA, with the proposed development site located within the NWIS cSPA site area, the criteria that avoidance of designated sites is typically an important parameter in a site selection process, as highlighted in Chapter 5 of the EIAR, the proximity of Rockabill SPA (c.150m from array), in addition to 10 SPAs and 9 SACs in the wider area, which are all within the envelope of the NWIS cSPA and/or are ecologically connected, <p>the applicant is requested to review Chapter 5 in relation to site selection and the rationale for choosing this site for development and provide further justification and rationale regarding the suitability of the site for the proposed development, in light of the above.</p>	<p>On foot of the submissions received in response to the Developer's planning application, continued consultation with the NPWS and the RFI issued by the Commission, the Developer has made design refinements to the offshore infrastructure of the proposed development. The Developer has committed to reduce the spatial extent of the offshore infrastructure to minimise the interactions with the North-west Irish Sea SPA. This has influenced the layout of the WTGs as described in Section 6.1 and 6.3.</p>
8 (e) (vi)	<p>North-west Irish Sea cSPA Common Guillemot: The DAU observation states that the proposed development would reduce the habitat suitability for Common Guillemot of an area equating to 8.5% of the NWIS cSPA, which would contravene the Conservation Objective for the SPA to maintain its favourable conservation condition.</p> <p>The applicant is requested to justify its interpretation of the data in relation to Common Guillemot and, where appropriate, re-evaluate the data and re-interpret the consequences for the impacts on the Conservation Objectives of the NWIS cSPA, having regard to the observation from the DAU.</p>	<p>The Developer participated in further consultation with the NPWS in in 2025 and 2026.</p> <p>Following this consultation, the Developer refined the layouts to Project Option 1 and 2 to reduce the spatial extent of offshore infrastructure overlap with the Northwest Irish Sea Special Protection Area (NWIS SPA). Further information on this consultation is included in Appendix A1.2.</p>
10 (a)	<p>Having regard to information submitted in the EIAR, the NPWS underwater noise guidelines (NPWS, 2014), the strict protections afforded to marine mammals under the Wildlife Act 1976, as amended, in addition to observations from prescribed bodies and observers, the Board requires a comprehensive suite of noise abatement measures to be proposed and assessed in addition to the existing mitigation measures referenced in the planning application documentation...</p>	<p>The Developer has proposed a refinement to the foundation types used for the wind turbine generators (WTGs). Instead of either monopiles or jackets, only jackets will be used. Additionally, instead of installation with pin piles the jackets will be installed with suction buckets.</p> <p>Following careful examination and assessment by the Developer, this refinement has been implemented to significantly reduce the level of underwater noise generated by the proposed development by eliminating pile driving noise during construction.</p> <p>Further information on the underwater noise impacts of revised WTG foundations is provided in Chapter 14 of this Addendum to the EIAR and Appendix A14.1. The update to this chapter in relation to this, is provided in Sections 6.1, 6.2, 6.3, 6.4, 6.5, 6.11</p>

6.1 Overview of proposed development

The only change required to Section 6.1 in Chapter 6 of the 2024 EIAR is in relation to Image 6.2. The image, which presented WTGs with monopiles, has been updated to show the WTGs with jacket substructures and suction bucket foundation and to remove the previous depiction of an ownership boundary, as this aspect is not relevant to the graphical illustration of the proposed development.

For the purposes of clarity, Image 6.2 from Chapter 6 of the 2024 EIAR shall be deleted and replaced with Image A6.1.

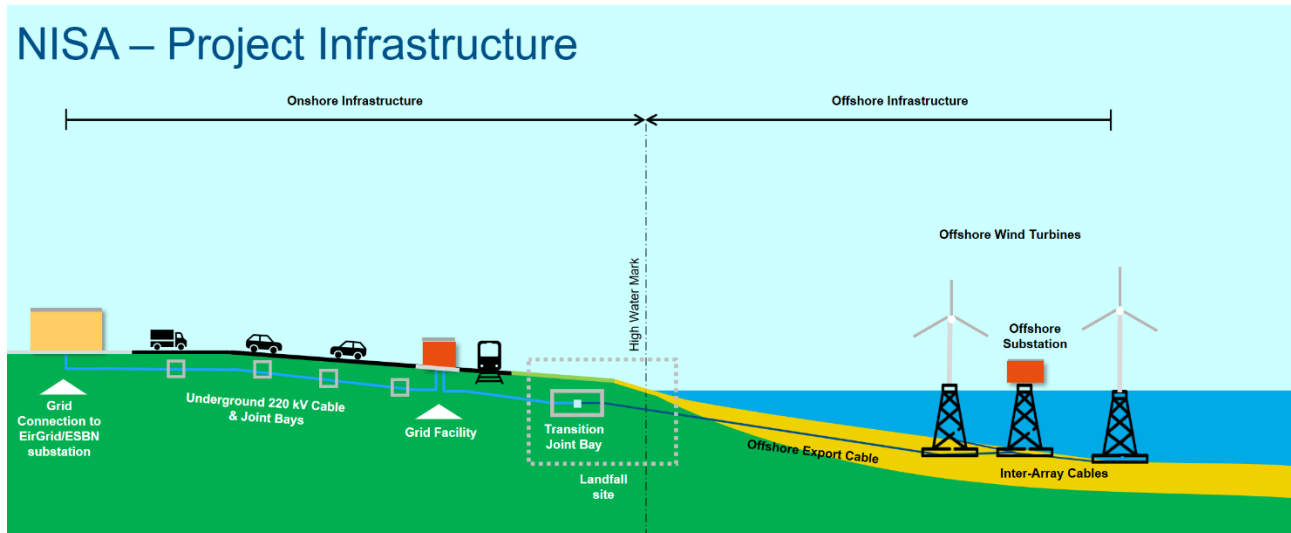


Image A6.1 Infrastructure of the proposed development – not to scale (Source: Arup) (Replacing Image 6.2 of the 2024 EIAR)

There are no further changes required to this section. Refer to Section 6.1 of Chapter 6 of the 2024 EIAR.

6.2 Overview of Offshore Infrastructure

6.2.1 Introduction

The changes required to Section 6.2.1 in Chapter 6 of the 2024 EIAR are in relation to the description of the nearest WTG to the coastline and to describe the reduced footprint of the infrastructure. Additional geophysical surveys have informed an update to the array area water depths. These have been updated following the refinements to the WTG and OSP layout for Project Option 1 and Option 2.

For the purposes of clarity, the following text from Section 6.2.1 of Chapter 6 in the 2024 EIAR is deleted:

“At its closest point, the array area is located approximately 11.3km from land in water depths of approximately 30m to 63m below lowest astronomical tide (LAT), with the closest WTG situated approximately 12.3km from the coastline.”

And replaced by:

At its closest point, the array area is located approximately 11.3km from land. The Array area is located in water depths of approximately 33m to 63m below lowest astronomical tide (LAT), with the closest WTG situated approximately 12.4km from the coastline.

Additionally, in response to RFI Section 6, the footprint of infrastructure within the array area has been refined to reduce the impacts on the North-west Irish Sea SPA. Therefore, the following text shall also be included to Section 6.2.1 of Chapter 6:

Within the array area, the Developer has committed to reduce the spatial extent of the offshore infrastructure within the North-west Irish Sea SPA. The refinement of the footprint of offshore infrastructure is illustrated in Image A5.1 for Project Option 1 and Image A5.2 for Project Option 2 of Appendix A5.1.

There are no further changes required to this section. Refer to Section 6.2.1 of Chapter 6 of the 2024 EIAR.

6.2.2 Design Flexibility Opinion

As noted at the outset of this chapter, design refinements are required to the proposed development. These refinements are explained in full in Appendix A5.1. However, all refinements to the proposed development remain consistent with the Design Flexibility Opinion issued by An Bord Pleanála on 2 February 2024 as detailed in Appendix A5.1.

Therefore, there are no changes to the section. Refer to Section 6.2.2 of Chapter 6 of the 2024 EIAR.

6.2.3 Project Options and Design Flexibility

The only change required for Section 6.2.3 of Chapter 6 of the 2024 EIAR is Table 6.2 following the refinement from monopile or jacket foundation types to just jacket substructures with suction bucket foundations (further information is provided in Section 6.5 below).

For the purposes of clarity, Table 6.2 from Chapter 6 of the 2024 EIAR shall be deleted and replaced with Table A6.1.

Table A6.1: High Level Overview of the two Project Options for the proposed development (Replacing Table 6.2 of the 2024 EIAR)

Parameter	Project Option 1	Project Option 2
Number of WTGs	49	35
WTG blade tip height (m above LAT)	290	316 outside aviation restricted zone, 311 inside aviation restricted zone*
Rotor Diameter (m)	250	276
Foundation type (WTGs)	Multi-leg suction bucket jackets (hereafter referred to as 'SBJs')	SBJs
Number of OSPs	1	1
Foundation Type (OSP)	4 – legged SBJ or Jacket with pin piles	4-legged SBJ or Jacket with pin piles
Offshore export cable length (km)	18	18
Inter-array cable length (km)	111	91

*An aviation restricted zone (of 312m LAT) has been identified by the Developer due to the partial overlap of the array area with a Dublin Airport controlled airspace meaning 8 turbines will have a 5m reduction in tip height due to being within the aviation restricted zone. This is further detailed in Volume 3, Chapter 19: Aviation and Radar.

There are no further changes required to this section. Refer to Section 6.2.3 of Chapter 6 of the 2024 EIAR.

6.3 Offshore Wind Turbine Generators (WTGs)

6.3.1 WTG Characteristics

The only change required to this section is due to the change of foundation type from monopiles and jackets with pin piles to SBJs for both Project Option 1 and Project Option 2. Therefore, the only change in this section is to Table 6.3 from Chapter 6 of the 2024 EIAR. For the purposes of clarity, Table 6.3 of the 2024 EIAR shall be deleted and replaced with the Table A6.2 below.

Table A6.2 WTG Design Parameters (Replacing Table 6.3 of the 2024 EIAR)

Parameter	Project Option 1	Project Option 2
Number of WTG	49	35
WTG tip height (m above lowest astronomical tide (LAT))	290	316* or 311**
Hub height (m above LAT)	165	178
Rotor diameter (m)	250	276
Blade tip clearance (m above LAT)	40	40* or 35**
Blade width (m)	7	7.5
Pitch (degrees)	3.6-5.6	3.6-5.6
Operational time	95%	95%
Total swept area (m ²)	49,090	59,830
Nacelle and Hub		
Length (m)	31	35
Breadth (m)	15	18
Height (m)	15	18
Tower Diameter (m)	9	10
Rotor rotational speed (m/s)	3-8.3	3-7.5
Foundation type (See Section 6.5 below for further details)	SBJs	SBJs

*When located outside the aviation restricted zone

**When located inside the aviation restricted zone

There are no further changes required to this section. Refer to Section 6.3.1 of Chapter 6 of the 2024 EIAR.

6.3.2 Layout

The reason for the changes to this section are a result of the refinements in the WTG layout following consultation with the IRCG. The design refinements are further explained in Appendix A5.1.

The changes to Section 6.3.2 of Chapter 6 in the EIAR are specifically in relation to the nearest WTG to the coastline and the Structure Exclusion Zone. The changes to the Structure Exclusion Zone is an increase from 3nm to 3.06nm.

Therefore, the following text from Section 6.3.2 of Chapter 6 in the 2024 EIAR shall be disregarded:

“Accounting for the proposed 500m limit of deviation in the final siting of the WTG, the nearest WTG from shore is 13km for Project Option 1 and 12.3km for Project Option 2.

The proposed development is committed to a Structure Exclusion Zone within the southern portion of the array area where no WTG will be sited. The Structure Exclusion Zone has been established to ensure a 3nm gap between Rockabill Island and the nearest WTG within the offshore development area.”

And replaced with the following text:

Accounting for the proposed 500m limit of deviation in the final siting of the WTG, the nearest WTG from shore is 12.4km for both Project Option 1 and Project Option 2.

The proposed development is committed to a Structure Exclusion Zone within the southern portion of the array area where no WTG will be sited. The Structure Exclusion Zone has been established to ensure a 3.06nm gap between Rockabill Island and the nearest WTG within the offshore development area.

Suction bucket jacket installation will be attempted at the proposed WTG locations under both Project Options. Prior to installation of the foundations, pre-construction surveys of the seabed will be required to confirm that no obstructions (e.g. UXO, seabed boulders, fishing debris) are present. If obstructions are identified, the proposed area will be cleared in advance of installation works. In the event that seabed intervention measures are not possible, the foundation may be micro-sited to avoid the obstructions. In addition, there may be a need to microsite the foundations to avoid any sensitive seabed features (e.g. archaeological) that may be identified. The proposed limit for micro-siting will be 100m, with any micro-sited location to be located within the proposed 500m limit of deviation. Micro-siting may also be used as contingency measure in the event of SBJ installation refusal. Should the SBJ not be able to reach the target penetration depth due to unforeseen ground conditions (e.g. sub-surface boulders or localised stronger soils), the foundation will be removed from the seabed, and a further installation attempt will be made at a micro-sited location.

There are no further changes required to this section. Refer to Section 6.3.2 of Chapter 6 of the 2024 EIAR.

6.3.3 Control Systems

There are no changes to this section. Refer to Section 6.3.3 of Chapter 6 of the 2024 EIAR.

6.3.4 Oils, Fluids and Gases

There are no changes to this section. Refer to Section 6.3.4 of Chapter 6 of the 2024 EIAR.

6.3.5 Corrosion Protection

There are no changes to this section. Refer to Section 6.3.5 of Chapter 6 of the 2024 EIAR.

6.3.6 Access

There are no changes to this section. Refer to Section 6.3.6 of Chapter 6 of the 2024 EIAR

6.4 Offshore Substation Platform (OSP)

As a result of the layout refinements driven by consultation with the IRCG, the location of the Offshore Substation Platform (OSP) has been slightly amended. Both Figures 6.1 and 6.2 of the 2024 EIAR have been updated and are included in Volume 7A of this Addendum to the EIAR with the same titles.

Therefore, the following text from Section 6.4 from Chapter 6 in the 2024 EIAR shall be disregarded:

“Accounting for the proposed limit of deviation in the final siting of the OSP, the closest it will be from shore is 14.8km for Project Option 1 and 14.4km for Project Option 2.”

And replaced with the following text:

Accounting for the proposed limit of deviation in the final siting of the OSP, the closest it will be from shore is 14.9km for Project Option 1 and 14.7km for Project Option 2.

There are no other changes to this section.

There are no further changes required to the introductory text of this section. Refer to Section 6.4 of Chapter 6 of the 2024 EIAR.

6.4.1 OSP Characteristics

Due to the change in foundation from monopiles or jackets to SBJs exclusively in both Project Option 1 and Project Option 2, this section shall be updated.

Therefore, the following text from Section 6.4.1 of Chapter 6 in the 2024 EIAR shall be disregarded:

“The topside which will be supported by either a jacket, or by one or two monopiles. Substructures and foundations are described in Section 6.5.”

And replaced with the following text:

The topside will be supported by a SBJ or a jacket substructure on drilled pin pile foundations. Substructures and foundations are described in Section 6.5.

Image 6.4 from Section 6.4.1 of Chapter 6 of the 2024 EIAR shall also be disregarded as there are no monopile foundations considered for the proposed development. Therefore, Table 6.4 of Chapter 6 in the 2024 EIAR shall also be disregarded and replaced with Table A6.3 below.

Table A6.3 OSP Design Parameters for Project Option 1 and Project Option 2 (Replacing Table 6.4 of the 2024 EIAR)

Item	Parameter
Number of OSP (s)	1
Height of Topside above sea level (m above lowest astronomical tide)	47
Height of Communications Mast above sea level (m above lowest astronomical tide)	67
Topside dimensions (m) (length x width)	45 x 45
OSP Foundations	
Number of Jacket Legs	4
Jacket Footprint, centre distance between legs at seabed level (m)	40 x 40
SBJs	
Number of suction buckets	4
Suction bucket minimum diameter (per suction bucket) (m)	8
Suction bucket maximum diameter (per suction bucket) (m)	15
Skirt Length minimum penetration into seafloor (m)	5
Skirt Length maximum penetration into seafloor (m)	30
Jackets with drilled pin piles	
Number of drilled pin piles	4
Pile Diameter (m)	6
Seabed Penetration (m)	60

There are no further changes required to this section. Refer to Section 6.4.1 of Chapter 6 of the 2024 EIAR.

6.4.2 Oils and Fluids

There are no changes to this section. Refer to Section 6.4.2 of Chapter 6 of the 2024 EIAR.

6.4.3 Access

There are no changes to this section. Refer to Section 6.4.3 of Chapter 6 of the 2024 EIAR.

6.5 Substructures and Foundations

Due to the change in foundations from monopiles or jackets to jackets in Project Option 1 and Project Option 2, this section shall be updated. As a result, the following introductory text from Section 6.5 of Chapter 6 in the 2024 EIAR shall be deleted:

“The foundation types that are being considered include:

- *WTG foundations:*
 - *Project Option 1: monopiles; and*
 - *Project Option 2: monopiles or jacket foundations (three or four leg configurations, with pin piles).*
- *OSP foundations (for Project Option 1 and 2):*
 - *A four-legged jacket foundation with pin piles.*
 - *One monopile; and*
 - *Two monopiles.”*

And replaced with the following text:

The foundation types that are being considered include:

- WTG foundations (for Project Options 1 and 2):
 - SBJs
- OSP foundations (for Project Options 1 and 2)
 - A four-legged jacket foundation with suction buckets or drilled pin piles.

There are no other changes required to the introductory text of this section. Refer to Section 6.5 of Chapter 6 of the 2024 EIAR.

6.5.1 Monopile

Monopiles are no longer included as a substructure option for the proposed development. Therefore, this section from the 2024 EIAR shall be deleted and removed from further assessment within the EIAR.

6.5.2 Jacket

SBJs are the only option being considered for the WTGs in Project Option 1 and Project Option 2. SBJs and drilled pin pile jacket foundations are considered for the OSP in both Project Options. There are no pin piles considered for the WTG jacket foundations in either Project Option.

Therefore, the text and Image 6.6 from Section 6.5.2 of Chapter 6 in the 2024 EIAR shall be deleted and replaced with Image A6.2 and the text herein. Table 6.7 of the 2024 EIAR shall be deleted and replaced with the Table A6.4 below.

The WTGs and the OSP for both project options will have jacket substructures. Jacket substructures typically consist of three or four main legs, connected to a lattice structure with welded tubular steel cross-braces. See Image 6.2 indicating how a WTG on a jacket presents above the water line. The tubular steel transition piece (TP) connecting the WTG tower to the jacket, is integrated into the jacket design. Each leg is secured to the sea floor using a suction bucket for the WTGs and OSP, with the option of drilled pin-piles for the OSP.

Jacket substructures are welded to suction bucket foundations or grouted to pin piles. This process is described further in Chapter 8.



Image A6.2 Typical WTG on a Jacket foundation (Source: CIP) (Replacing Image 6.6 of the 2024 EIAR)

The dimensions of the jacket substructures with drilled pin piles (for the OSP only) and suction bucket foundations are included in Table A6.4.

Table A6.4 Jacket Design Parameters (Replacing Table 6.7 of the 2024 EIAR)

Item	WTG Parameter	OSP Parameter
Number of Jackets	35 - 49	1
Number of legs per Jacket	3 or 4	4
Minimum Jacket footprint, centre distance between legs at seabed level (m)	30 x 30	25 x 25
Maximum Jacket footprint, centre distance between legs at seabed level (m)	40 x 40	40 x 40
Number of suction buckets per jacket	3 or 4	4
Minimum Seabed penetration (m)	5	5
Maximum Seabed penetration (m)	30	30
Minimum Suction bucket diameter (m)	8	8
Maximum Suction bucket diameter (m)	15	15
Scour protection diameter (m)	98	98
Number of drilled pin piles per Jacket	n/a	4
Pin pile diameter (m)	n/a	6

Indicative material quantities associated with the pin piles, jackets, secondary steel, grouting, etc. for the entire proposed development for each Project Option are provided in Table A6.5. For the OSP, there is a difference in the type of grout required for pin pile foundations compared to the grout used for SBJ.

The grout used for pin pile foundation is used to fill the annulus between the outer steel surface of the pin pile to the wall of the drilled hole. This type of grout will have high strength and low shrinkage characteristics to ensure the structural capacity of the foundation.

In comparison, the grout used for SBJ applications is an under-lid grout which is placed under the bucket lid which acts as a void filler and prevents against loss of suction pressure of the foundation. This type of grout is generally lower strength than that used for pin pile foundations.

For the purposes of clarity, Table 6.8 of the 2024 EIAR shall be deleted and replaced with the Table A6.5 below.

Table A6.5 Indicative Material Quantities with Jackets and TP (Replacing Table 6.8 of the 2024 EIAR)

	Project Option 1	Project Option 2
WTG		
Primary Steel (t)	210,700	168,000
Secondary Steel (t) (access platforms, boat landing platforms, ladders, J-tubes) for WTG SBJs	160	160
Grout Volume (m ³) for SBJs	173,180	123,700
Galvanic Anode Cathodic Protection (GACP) Anodes – Zinc or Aluminium	20	20
OSP		
Primary Steel (t) for OSP on jacket pin piles	3,000	3,000
Primary Steel (t) for OSP on SBJs	4,000	4,000
Grout Volume (m ³) for OSP jacket pin piles to the bedrock	230	230
Under lid grout volume (m ³) for OSP on suction buckets	3,530	3,530

6.5.3 Corrosion Protection

There are no changes to this section. Refer to Section 6.5.3 of Chapter 6 of the 2024 EIAR.

6.5.4 Scour Protection

Due to the introduction of SBJs, the extent and volume of scour protection on the seabed has increased. Due to the larger seabed footprint and shallower seabed penetration of SBJs, the extent and volume of scour protection required for SBJs is typically greater than other foundation types.

For the purposes of clarity, the following text, and Table 6.9 from Section 6.5.4 of Chapter 6 from the 2024 EIAR shall be deleted:

“The scour protection diameter varies by foundation type. For monopiles, a diameter of 44m will be required, and 77m will be required for jacket foundations for WTG and 78m diameter for the OSP.

Table 6.9 provides the assumed scour protection requirements for the various foundation types. The volumes presented which are assumed to be installed during initial construction and expected to be sufficient to last for the operational phase of the proposed development.”

And replaced with the following:

The scour protection diameter for SBJs for both the WTG and OSP will be 98m. The scour protection diameter for the OSP jacket foundations with drilled pin piles will also be 98m.

Table A6.6 provides the assumed scour protection requirements for the various foundation types. Maximum volumes are presented which are assumed to be installed during initial construction and expected to be sufficient to last for the operational phase of the proposed development.

Table A6.6 Indicative Scour Protection Area (Replacing Table 6.9 of the 2024 EIAR)

Infrastructure	WTG	OSP	
Foundation Type	SBJ	SBJ	Jacket with pin piles
Scour protection per location (m ²)	7,543	7,543	7,543
Scour protection (all foundations) (m ²) – Project Option 1	369,605	7,543	7,543
Scour protection (all foundations) (m ²) – Project Option 2	142,503	7,543	7,543

There are no further changes required to this section. Refer to Section 6.5.4 of Chapter 6 of the 2024 EIAR.

6.6 Offshore Inter-Array Cables

There are no changes to the introductory text in this section. Refer to Section 6.6 of Chapter 6 in the 2024 EIAR.

6.6.1 Cable Configuration

There are no changes to this section. Refer to Section 6.6.1 of Chapter 6 in the 2024 EIAR.

6.6.2 Cable Protection

There are no changes to this section. Refer to Section 6.6.2 of Chapter 6 in the 2024 EIAR.

6.7 Offshore Export Cables

There are no changes to the introductory text in this section. Refer to Section 6.7 of Chapter 6 in the 2024 EIAR.

6.7.1 Cable Configuration

There are no changes to this section. Refer to Section 6.7.1 of Chapter 6 in the 2024 EIAR.

6.7.2 Cable Protection

There are no changes to this section. Refer to Section 6.7.2 of Chapter 6 in the 2024 EIAR.

6.8 Navigation, Colour, Marking and Lighting

There are no changes to this section. Refer to Section 6.8 of Chapter 6 in the 2024 EIAR.

6.9 Landfall Site

6.9.1 Landfall Location and Context

There are no changes to this section. Refer to Section 6.9.1 of Chapter 6 in the 2024 EIAR.

6.9.2 Landfall - Offshore Infrastructure

There are no changes to this section. Refer to Section 6.9.2 of Chapter 6 in the 2024 EIAR.

6.10 Operation and Maintenance

6.10.1 Operation and Maintenance Strategy

There are no changes to this section. Refer to Section 6.10.1 of Chapter 6 in the 2024 EIAR.

6.10.2 Operation and Maintenance Facility

There are no changes to this section. Refer to Section 6.10.2 of Chapter 6 in the 2024 EIAR.

6.10.3 Operation and Maintenance Vessels

There are no changes to this section. Refer to Section 6.10.3 of Chapter 6 in the 2024 EIAR.

6.10.4 Operation and Maintenance Safety Zones

The Marine Survey Office (MSO) published *The Maritime Navigation Safety and Emergency Response Guidance Documents for Offshore Renewable Energy Installations (OREI)* in June 2025. The Developer has reviewed the MSO guidance and determined that no change is required to Section 6.10.4 of the 2024 EIAR.

6.11 Decommissioning

There are no changes to this section. Refer to Section 6.11 of Chapter 6 in the 2024 EIAR.

6.11.1 WTGs

There are no changes to this section. Refer to Section 6.11.1 of Chapter 6 in the 2024 EIAR.

6.11.2 Foundations

Due to the change of foundation types from monopiles and pin piles to SBJs for the WTGs and SBJs or jackets with drilled pin piles for the OSP, the description of decommissioning activities requires a change. Therefore, the following text from Section 6.11.2 of Chapter 6 from the 2024 EIAR shall be deleted:

“After decommissioning of the transition piece in monopile and jacket foundations, it is assumed the piled foundations would be cut approximately 1-2m below the seabed and removed, as it may be determined that the removal would result in greater environmental impacts than leaving in-situ. Due consideration seabed level across the array area would be undertaken at the point of decommissioning.

This is achieved by inserting pile cutting devices inside the foundations. Once the piles are cut, the foundations could be lifted and removed from the site. At this time, it is not thought to be reasonably practicable to remove entire piles from the seabed, as this may cause damage to the seabed environment, but endeavours will be made to ensure that the sections of pile that remain in the seabed are fully buried and made safe. It is anticipated that any scour protection will be left in situ.”

And replaced with the following text:

After decommissioning of the transition piece in jacket foundations, it is assumed the foundations would be cut approximately 1-2m below the seabed and removed, as it may be determined that the removal would result in greater environmental impacts than leaving in-situ. Due consideration to the seabed level across the array area would be undertaken at the point of decommissioning.

This is achieved by using foundation cutting devices to cut and separate the jacket from the foundation, be it a pin pile or suction bucket. Once the piles or buckets are cut, the foundations could be lifted and removed from the site. At this time, it is not thought to be reasonably practicable to remove entire piles or suction buckets from the seabed, as this may cause damage to the seabed environment, but endeavours will be made

to ensure that the sections of foundation that remain in the seabed are fully buried and made safe. It is anticipated that any scour protection will be left in situ.

There are no further changes required to this section. Refer to Section 6.11.2 of Chapter 6 of the 2024 EIAR.

6.11.3 Cables

There are no changes to this section. Refer to Section 6.11.3 of Chapter 6 in the 2024 EIAR.

6.11.4 Decommissioning Vessels

There are no changes to this section. Refer to Section 6.11.4 of Chapter 6 in the 2024 EIAR.

6.12 References

In accordance with RFI Section 1 (b), a review of updated guidance documents was undertaken. The following reference shall be included in Section 6.12:

Marine Survey Office (2025) *The Maritime Navigation Safety and Emergency Response Guidance Documents for Offshore Renewable Energy Installations*.

There are no other changes required to this section. Refer to Section 6.12 in Chapter 6 in the 2024 EIAR.