

Note: Readers are advised that this document may require ongoing amendment to reflect (i) developments in the regulatory framework applicable to offshore wind farm (“**OWF**”) development and connection to the Transmission System (ii) decisions of relevant regulatory bodies and (iii) specific project requirements necessary and applicable on a case-by-case basis. Any actions taken on foot of the information contained in this document is at the reader’s sole risk and discretion.

ORESS Tonn Nua Bidder Information Pack

24th June 2025

Ref: ORESS-Tonn Nua-GC-GCI_V2

Dear Prospective Bidder,

EirGrid plc, a statutory corporation having its principal office at The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4 and having company registration number 338522 (the “**Company**”) has agreed, subject to the conditions herein contained, to provide all prospective bidders (the “**Prospective Bidders**”) into ORESS Tonn Nua with indicative details for a connection (the “**Indicative Connection Method**”). The Indicative Connection Method of the Prospective Bidder’s offshore wind facility will have a Maximum Export Capacity (“**MEC**”) of 900 MW, split between the Cork area (450 MW) and the Wexford area (450 MW) and will be known as Tonn Nua Offshore Windfarm (the “**Facility**”). The Indicative Connection Method is set out in Section 1 and 2 below (herein referred to as the “**Grid Connection Information Pack**” or “**GCI**”).

The Company has agreed to provide this GCI and the information contained in the absence of key information and in advance of a connection agreement in place with the Prospective Bidder. Whilst the Company has endeavored to ensure the accuracy and completeness of this GCI and the connection method contained within, it must be noted that the information provided within is for information purposes only and is subject to change. For the avoidance of any doubt, the Company reserves the right to change any elements of the proposed connection method, during the connection offer process. Reliance on and use of this information is at the sole discretion and risk of the Prospective Bidder. This GCI does not infer any rights to the Prospective Bidder with regard to any future guarantee of receiving a connection offer from the Company for the connection of the Facility to the Transmission System (the “**Offer**”). The Company understands that the Prospective Bidder will only receive an Offer if the Prospective Bidder is successful in the Second Offshore Competition under the Renewable Energy Support Scheme Auction (“**ORESS Tonn Nua**”) run by the Irish

Government's Department of Climate, Energy and Environment ("DCEE") and on the basis that the Prospective Bidder meets the necessary conditions required under same, in accordance with the relevant CRU Direction (CRU/2024/124) which includes the submission of an ORESS Tonn Nua Notice of Award (as defined in the ORESS Tonn Nua Terms and Conditions published by DCEE on 30th October 2024) to the Company no later than three (3) calendar months from receipt of the ORESS Tonn Nua Notice of Award from DCEE.

This GCI, and all contents of and appendices to it, are provided solely for the Prospective Bidder's information purposes. Actions taken by the Prospective Bidder on foot of information and statements contained within this GCI are taken at the Prospective Bidder's sole risk and discretion. The Company accepts no responsibility, duty or liability for any loss or damage (whether direct, indirect or consequential loss or damage) suffered by the Prospective Bidder arising from their reliance on this GCI. As such, reliance on this GCI is strictly at the Prospective Bidder's sole risk.

Please note that this GCI refers solely to what has been assessed for the connection of Tonn Nua. The Company is mindful that Tonn Nua is one element of the Government's Phase 2 overall strategy. The Company continues to engage with stakeholders on future connections, however for the avoidance of doubt future connections and any potential interactions with the Tonn Nua project is outside the scope of this GCI pack.

1 The Indicative Connection Method (Cork)

The Indicative Connection Method will be a double circuit loop into the Aghada – Knockraha 1 & 2 220 kV circuits and will require the provision and installation of the following:

1.1.1 New 220 kV 8 Bay Enhanced Ring Station comprising (at a minimum) of:

- 4 x 220 kV busbar sections (A1, B1, A2, B2)
- 4 x 220 kV bays for the loop in connection
- 1 x 220 kV bay for the onshore compensation compound ("**Cork Onshore Compensation Compound** or **COCC**") connection
- 3 x 220 kV spare bays
- 1 x 220 kV wing couplers
- 4 x 220 kV sectionaliser bays

(the "**New 220 kV Connecting Station at Cork**")

1.1.2 Expandability:

Expandability options for the New 220 kV Connecting Station at Cork will also be considered as part of the assessment of a suitable substation location. For the avoidance of doubt no charges for this work have been included or will be to a Prospective Bidders account.

(the **“Expandability Options at Cork”**)

1.1.3 220 kV Loop in Connection:

4 x 220 kV circuits are required to loop into the Aghada – Knockraha 1 & 2 220 kV circuits. This loop in connection shall be rated to achieve 1707/2021 A. This connection will be via an underground cable (**“UGC”**) or overhead line (**“OHL”**) and will include all associated equipment.

(the **“Aghada – Knockraha 1 220 kV Loop In”**)

(the **“Aghada – Knockraha 2 220 kV Loop In”**)

1.1.4 Remote End Works:

Relevant remote end works at Aghada 220 kV station and Knockraha 220 kV station.

(the **“Remote End Works at Cork”**)

1.1.5 Fibre Link:

A redundant optical fibre link is to be provided to the New 220 kV Connecting Station at Cork. Therefore, an optical fibre link is to be installed between the New 220 kV Connecting Station at Cork and Aghada 220 kV Station and between the New 220 kV Connecting Station at Cork and Knockraha 220 kV Station.

(the **“New Loop In Station Fibre Link at Cork”**)

1.1.6 New 220 kV Cable Section:

UGC to connect the adjacent COCC and the connecting transmission station.

(the **“COCC – New Loop In Station 220 kV Station Cable”**)

1.1.7 Fibre Link:

A redundant optical fibre link is to be provided between the COCC and the connecting

transmission station.

(the **“COCC – New Loop in Station Fibre Link”**)

1.1.8 Power Quality Recorder (“PQR”):

1 x PQR installed on the COCC 220 kV bay in the New 220 kV Connecting Station at Cork.

(the **“Power Quality Recorder at Cork”**)

1.1.9 Metering:

Main and checks metering for the Facility are required on the bay coming from the onshore compensation compound.

(the **“Metering at Cork”**)

1.1.10 New Cork Onshore Compensation Compound:

1 x compensation compound consisting (as a minimum) of:

- 1 x busbar (A1)

- 1 x offshore cable bay

- 1 x transmission system bay

- 1 x reactor bay with point on wave (**“POW”**) soft switching equipment

- 1 x static compensator (**“STATCOM”**) bay with POW soft switching equipment

- 1 x filter bay with POW soft switching equipment

Additional bays as required to connect any additional equipment (e.g. transformer) that is identified as part of the detailed design.

(the **“Cork Onshore Compensation Compound”** or **“COCC”**)

1.1.11 Power Quality Recorders:

6 x PQRs are required at the offshore platform to monitor the 66 kV array cable feeders. The number of PQRs is dependent on the number of 66 kV array cables.

(the **“Connection Point PQRs at Cork”**)

1.1.12 STATCOM:

1 x STATCOM to be connected to a bay in the COCC. The STATCOM shall be capable of ensuring the Facility can operate at +0.93 Power Factor.

(the **“STATCOM at the COCC”**)

1.1.13 Harmonic Filter:

1 x filter to be connected to a bay in the COCC. Further detailed analysis is required to determine the filter requirements. Additional compensation equipment will also be required to compensate the filter.

(the **“Filter at the at the COCC”**)

1.1.14 Reactors:

1 x shunt reactor to be connected onto the offshore cable at the COCC.

1 x shunt reactor to be connected onto the offshore cable at the offshore substation (**“OSS”**).

1 x switched shunt reactor to be connected to a bay in the COCC.

The sizing and configuration of the reactors requires additional detailed analysis. This design shall consider the voltage along the offshore cable and on the OSS and ensure that all equipment remains within allowable limits during all operating conditions.

(the **“Reactors at COCC”**)

1.1.15 Onshore/Offshore Cable(s):

Onshore/offshore cable solution to connect the COCC to the OSS including associated terminations, transition joint bays and all associated equipment. The cable(s) shall include a fibre optic link between the COCC and OSS. The cable(s) shall be rated to carry 450 MW in all system conditions. When the cable lengths and the reactive power solution are confirmed, power flow studies are required to determine the maximum current in all system conditions.

The cable(s) shall be designed so that it can carry the maximum expected current.

(the **“Cork Onshore/Offshore Cable(s)”**)

The indicative onshore/offshore cable length is assumed between 72 – 83 km. This an assumption based on best estimates as OCC location, cable route, landfall location and

OSS locations are not yet defined.

1.1.16 Offshore Station comprising (at a minimum) of:

- 2 x cable/transformer bay
- 1 x 66 kV busbar (A1 and A2)
- 2 x 66 kV transformer bay
- 1 x 66 kV sectionaliser bay
- 6 x 66 kV bays for the connection of the offshore array cables (number dependant on offshore array design).

(the “**Cork Offshore Station**”)

1.1.17 Transformer:

2 x transformers located on the offshore platform. The transformer shall be rated to achieve 300 MVA.

(the “**Cork Offshore Transformer**”)

1.1.18 Metering:

6 x main and check meters for the facility are required at the connection point on the offshore platforms. The number of meters is dependent on the number of 66 kV array feeders.

(the “**Metering at the Cork Offshore Connection Point**”)

2 The Indicative Connection Method (Wexford)

The Indicative Connection Method will be a loop into the Great Island – Kellis 220 kV circuit and a loop into the Great Island – Lodgewood 220 kV circuit and will require the provision and installation of the following:

2.1.1 New 220 kV 8 Bay Enhanced Ring Station:

- 4 x 220 kV busbar sections (A1, B1, A2, B2)
- 4 x 220 kV bays for the loop in connection
- 1 x 220 kV bay for the onshore compensation compound (**“Wexford Onshore Compensation Compound or WOCC”**) connection
- 3 x 220 kV spare bays
- 1 x 220 kV wing couplers
- 4 x 220 kV sectionaliser bays

(the **“New 220 kV Connecting Station at Wexford”**)

2.1.2 Expandability:

Expandability options for the New 220 kV Connecting Station at Wexford will also be considered as part of the assessment of a suitable substation location. For the avoidance of doubt no charges for this work have been included or will be to a Prospective Bidders account.

(the **“Expandability Options at Wexford”**)

2.1.3 Great Island – Kellis 220 kV Loop in Connection:

2 x 220 kV circuits are required to loop into the Great Island – Kellis 220 kV circuit. This loop in connection shall be rated to achieve 1707/2021 A. This connection will be via UGC or OHL and will include all associated equipment.

(the **“Great Island – Kellis 220 kV Loop In”**)

2.1.4 Great Island – Lodgewood 220 kV Loop in Connection:

2 x 220 kV circuits are required to loop into the Great Island – Lodgewood 220 kV circuit. This loop in connection shall be rated to achieve 1707/2021 A. This connection will be via UGC or OHL and will include all associated equipment.

(the “Great Island – Lodgewood 220 kV Loop In”)

2.1.5 Remote End Works:

Relevant remote end works at Great Island 220 kV station, Lodgewood 220 kV station and Kellis 220 kV station.

(the “Remote End Works at Wexford”)

2.1.6 Fibre Link:

A redundant optical fibre link is to be provided to the New 220 kV Connecting Station at Wexford. Therefore, an optical fibre link is to be installed between the New 220 kV Connecting Station at Wexford and Lodgewood 220 kV Station and between the New 220 kV Connecting Station at Wexford and Kellis 220 kV Station. Two optical fibre links are also to be installed between the New 220 kV Connecting Station at Wexford and Great Island 220 kV Station.

(the “New Loop in Station Fibre Links at Wexford”)

2.1.7 New 220 kV Cable Section:

UGC to connect the adjacent WOCC to the transmission system. Including the associated cable terminations/sealing ends at either end of the cable.

(the “WOCC – New Loop in Station 220 kV Station Cable”)

2.1.8 Fibre Link:

A redundant optical fibre link is to be provided between the WOCC and the connecting transmission station.

(the “WOCC – New Loop in Station Fibre Link”)

2.1.9 Power Quality Recorder:

1 x PQR installed on the WOCC 220 kV bay in the New 220 kV Connecting Station at Wexford.

(the “Power Quality Recorder at Wexford”)

2.1.10 Metering:

Main and checks metering for the Facility are required on the bay coming from the offshore compensation compound at the grid interface point.

(the “**Metering at Wexford**”)

2.1.11 New Wexford Onshore Compensation Compound:

1 x compensation compounds consisting (as a minimum) of:

- 1 x busbar (A1)

- 1 x offshore cable bay

- 1 x transmission system bay

- 1 x reactor bay with POW soft switching equipment

- 1 x STATCOM Bay with POW soft switching equipment

- 1 x filter bay with POW soft switching equipment

Additional bays as required to connect any additional equipment that is identified as part of the detailed design.

(the “**Wexford Onshore Compensation Compound or WOCC**”)

2.1.12 Power Quality Recorders:

6 x PQRs are required at the offshore platform to monitor the 66 kV array cable feeders. The number of PQRs is dependent on the number of 66 kV array cables.

(the “**Connection Point PQRs at Wexford**”)

2.1.13 STATCOM:

1 x STATCOM to be connected to a bay in the WOCC. The STATCOM shall be capable of ensuring the Facility can operate at +0.93 power factor.

(the “**STATCOM at the WOCC**”)

2.1.14 Harmonic Filter:

1 x filter to be connected to a bay in the WOCC. Further detailed analysis is required to determine the filter requirements. Additional compensation equipment will also be required to compensate the filter.

(the “**Filter at the WOCC**”)

2.1.15 Reactors:

1 x shunt reactor to be connected onto the offshore cable at the WOCC.

1 x shunt reactor to be connected onto the offshore cable at the OSS.

1 x switched shunt reactor to be connected to a bay in WOCC.

The sizing and configuration of the reactors requires additional detailed analysis. This design shall consider the voltage along the offshore cable and on the OSS and ensure that all equipment remains within allowable limits during all operating conditions.

(the “**Reactors at WOCC**”)

2.1.16 Onshore/Offshore Cable(s):

Onshore/offshore cable solution to connect the OCC to the OSS including associated terminations, transition joint bays and all associated equipment. The cable(s) shall include a fibre optic link between the OCC and OSS. The cable(s) shall be rated to carry 450 MW in all system conditions. When the cable lengths and the reactive power solution are confirmed, powerflow studies are required to determine the maximum current in all system conditions.

The cable(s) shall be designed so that it can carry the maximum expected current.

The indicative onshore/offshore cable length is assumed between 61 – 63 km. This an assumption based on best estimates as OCC location, cable route, landfall location and OSS locations are not yet defined.

(the “**Wexford Onshore/Offshore Cable(s)**”)

2.1.17 Offshore Station comprising (at a minimum) of:

2 x cable/transformer Bay

2 x 66 kV busbar (A1 and A2)

2 x 66 kV transformer bay

1 x 66 kV sectionaliser bay

6 x 66 kV bays for the connection of the offshore array cables (number dependant on offshore array design).

(the “**Wexford Offshore Station**”)

2.1.18 Transformer:

2 x Transformer located on the offshore platform. The transformer shall be rated to achieve 300 MVA.

(the “**Wexford Offshore Transformer**”)

2.1.19 Metering:

6 x main and check meters for the Facility are required at the connection point on the offshore platforms. The number of meters is dependent on the number of 66 kV array feeders.

(the “**Metering at the Wexford Offshore Connection Point**”)

3 Assumptions

The Prospective Bidder is to be aware that this GCI is not a ‘connection offer’ and as such changes in the GCI generally and in the GCI Assumptions specifically may lead to a change in either the timing of the Connection and/or the Indicative Connection Method. In accordance with the CRU Decision Paper CRU2024124, the Prospective Bidder is reminded that the GCI and the list of contained Assumptions are for informational purposes and a more comprehensive list of assumptions and more certain detail will be provided in the Full Connection Offer following the auction.

3.1 Key Technical Assumptions:

3.1.1 Fibre available to Offshore Windfarm Operator:

The Company export cables will include a fibre optic cable (“**FOC**”) with a minimum of 48 fibre cores. Dedicated fibre cores will be allocated to the OWF ensuring segregation from any of the Companies telecoms infrastructure.

3.1.2 Number of Power Park Modules (“PPM”):

The OWF shall comprise of 6 PPMs which shall have a connection point at the 66 kV feeder bays. Please refer to Appendix 2.4 for further detail of the OWF connection point.

3.1.3 Array Voltage

The Company will provide 66 kV switchgear on the OSS to facilitate the connection of OWF 66 kV inter array cables.

3.1.4 Transformer per OSS Platform:

Up to 2 export transformers per offshore substation platform.

3.1.5 Developer Inputs Post Auction:

Please refer to **Appendix 7** for the outline of information that is required from the Tonn Nua OWF post-auction.

3.1.6 Functional Specifications

The Company's designs for the Tonn Nua transmission system shall comply with the relevant EirGrid Functional Specifications. The OWF shall be **in accordance** with the EirGrid Functional Specifications only where they have a direct impact on the interface between the OSS and the OWF. The Tonn Nua transmission system and the Tonn Nua OWF shall comply with all relevant sections of the Grid Code.

3.2 Target Level 0 Schedule:

The target schedule detailed in Appendix 1 is the best estimate made by the Company at the time of the auction. As noted in the Terms and Conditions ORESS Tonn Nua Offshore Wind Auction Ver. 1.1 dated 27th May 2025, the Company may update the Target Grid Delivery Date from time to time ahead of the Grid Standstill Date being confirmed.

3.2.1 Grid Delivery Date

The Grid Delivery Date as per ORESS Tonn Nua Terms and Conditions Ver. 1.1 dated 27th May 2025 is 1st July 2033. The project's Level 0 Schedule can be found in Appendix 1.

3.3 Provisional OSS location GPS Coordinates for auction¹:

OSS #	Easting	Northing
1	612,199	5,754,886
2	630,241	5,760,914

3.4 Provisional Offshore Substation Zones:

The diagram in Appendix 2 displays the provisional offshore substation zones.

3.5 Landfall and Grid Connection Zones:

A shortlist of options following our multi-criteria analysis (“MCA”) for proposed landfall zones and grid connections are provided in Appendix 3. These emerging best performing options will be further analysed to finalise the best performing options going forward. For more details of the multi criteria analysis please refer to the project website [Powering Up Offshore South Coast \(“PUOSC”\)](#)

3.6 Proposed High Level Equipment Requirements at the Offshore Platform:

The schematic diagram in Appendix 4 is an outline of typical high level equipment requirements at the offshore platform. The equipment positions are not indicative of the final positions and is not a general arrangement drawing. Each party shall be responsible for the installation and commissioning of their own equipment.

3.7 Connection Point

The Point of Common Coupling (“PCC”) between the offshore PPM and the Company is specified at the cable termination of the inter-array cables and the switchgear on the offshore substation platform. Diagram outlined in Appendix 5.

3.8 Risks and Opportunities:

The current top 10 risks and opportunities that are associated with the PUOSC project are displayed in the risk register outlined in Appendix 6.

3.9 Change Control:

The Company recognises that amendments may be required post auction, by either

¹ Centre point coordinates are indicative for auction purposes. Offshore Substation Zones are subject to change post completion of marine survey.

the Company or the successful Tonn Nua OWF Developer. These items will be considered through an appropriate change control process.

The Company intends to develop a suitable change control process for implementation once the successful Tonn Nua OWF Developer has been confirmed. This future change control process will be guided by the Phase 1 process, follow best industry practice and will form part of the Collaboration Agreement. The process will capture both Company and OWF Developer initiated changes.

4 Costs

4.1 Offshore Generator Transmission Use of System (“OG-TUoS”) Charges

The Company has calculated the OG-TUoS in accordance with the CRU’s ‘Phase 2 Offshore Wind – Grid Connection Charging Policy’ (ref CRU/2024/125)², and is payable on a monthly basis for a period of 30 years. The monthly OG-TUoS is €13.9550/kW. This is a fixed payment and not subject to indexation.

The CRU has decided that “the first OG-TUoS payment for the offshore grid connection charge will be made when the ‘grid delivery’ milestone has been achieved. That is, where (i) the Connection Assets can facilitate the sustained export of power (in an amount equal to the MEC); and (ii) the TSO has issued an Interim Operational Notification.”

4.2 Onshore Grid Charges

The cost for the onshore connection assets (that will be owned by ESB Networks) have been calculated by the Company in accordance with the CRU’s ‘Phase 2 Offshore Wind – Grid-related Information’ (ref CRU/2025/13)³. The total cost is €53,323,000.00 and is payable per below:

² [https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/Phase_2_Offshore_Wind - Grid Connection Charging Policy.pdf](https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/Phase_2_Offshore_Wind_-_Grid_Connection_Charging_Policy.pdf)

³ [https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/CRU Decision Phase 2 Offshore Wind - Grid-Related Information.pdf](https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/CRU_Decision_Phase_2_Offshore_Wind_-_Grid-Related_Information.pdf)

Payment Schedule	Amount	Payable
First Stage Payment: (€10,000 per MW)	€ 9,000,000.00	Prior to execution of the Connection Agreement by the Company.
Second Stage Payment: 70% of the Connection Charge less the First Stage Payment	€ 28,326,100.00	On Consents Issue Date (“CID”)
Third Stage Payment: 10% of the Connection Charge	€ 5,332,300.00	On CID + three (3) Months
Fourth Stage Payment: 10% of the Connection Charge	€ 5,332,300.00	On CID + six (6) Months
Fifth Stage Payment: 10% of the Connection Charge	€ 5,332,300.00	On CID + nine (9) Months

The CRU has confirmed that the First Stage Payment is non-refundable. The Onshore Grid Charges are fixed per CRU CRU/2025/13 decision but are subject to indexation.

The Company will require a Connection Charge Bond from the Tonn Nua OWF in an amount of €15,996,900.00 as security for the Connection Charge. Further details of the bonding arrangements will be contained in the Connection Agreement and deemed incorporated in the Offer.

The Tonn Nua OWF is obliged to provide the Connection Charge Bond prior to the Consents Issue Date.

5 **Interpretations**

Capitalised terms used but not otherwise defined herein shall have the meaning assigned to such terms in the Offshore General Conditions of Connection and Use of System (the “**General Conditions**”)⁴.

6 **Firm Access**

The 2025 Firm Access run assessed the Tonn Nua South Coast offshore in line with the Firm Access Methodology. This assessment determined the level of firm access that could be granted to the Tonn Nua offshore windfarms under the Firm Access Methodology. The results are outlined in the table below:

⁴ The Offshore General Conditions and Use of System are currently under development and will be published in due course.

Project Name	Connection Method	MEC (MW)	FAQ (MW)	FAQ Status	FAQ Allocation Date
Tonn Nua -Cork	New 220 kV Station looped into Aghada – Knockraha 1 & 2 220 kV Circuits	450	450	Firm	31/12/2031
Tonn Nua - Wexford	New 220 kV Station looped into the Great Island – Lodgewood and the Great Island – Kellis 220 kV Circuits	450	450	Firm	31/12/2031

Important points to note:

- As per the Decision Paper, the FAQ is allocated to generators only when connected on its **permanent** connection (i.e. when all permanent Transmission and (or) Distribution works are complete).
- The completion of all Site Related Connection Equipment is also a prerequisite for the allocation of the firm access.
- The FAQ can only be made effective in the market per the SEMO process and timelines set out below.
 - In order to have the Firm Access of the generation project reflected in the market registration data, the Participant will be responsible for contacting the Single Electricity Market Operator (SEMO) at BalancingMarketRegistration@sem-o.com to request a Firm Access Quantity update. This applies to both fully firm and partially firm capacity.
 - Additionally, please note that as stated in the [FAQ Change Request form](#), this change is dependent on successful validation by the Market Operator and the Transmission System Operator or Meter Data Provider as appropriate, which may take up to 28 days to implement. For the avoidance of doubt, the effective date for any changes to the market registration data will be agreed with SEMO as per the approved process.

Yours sincerely,

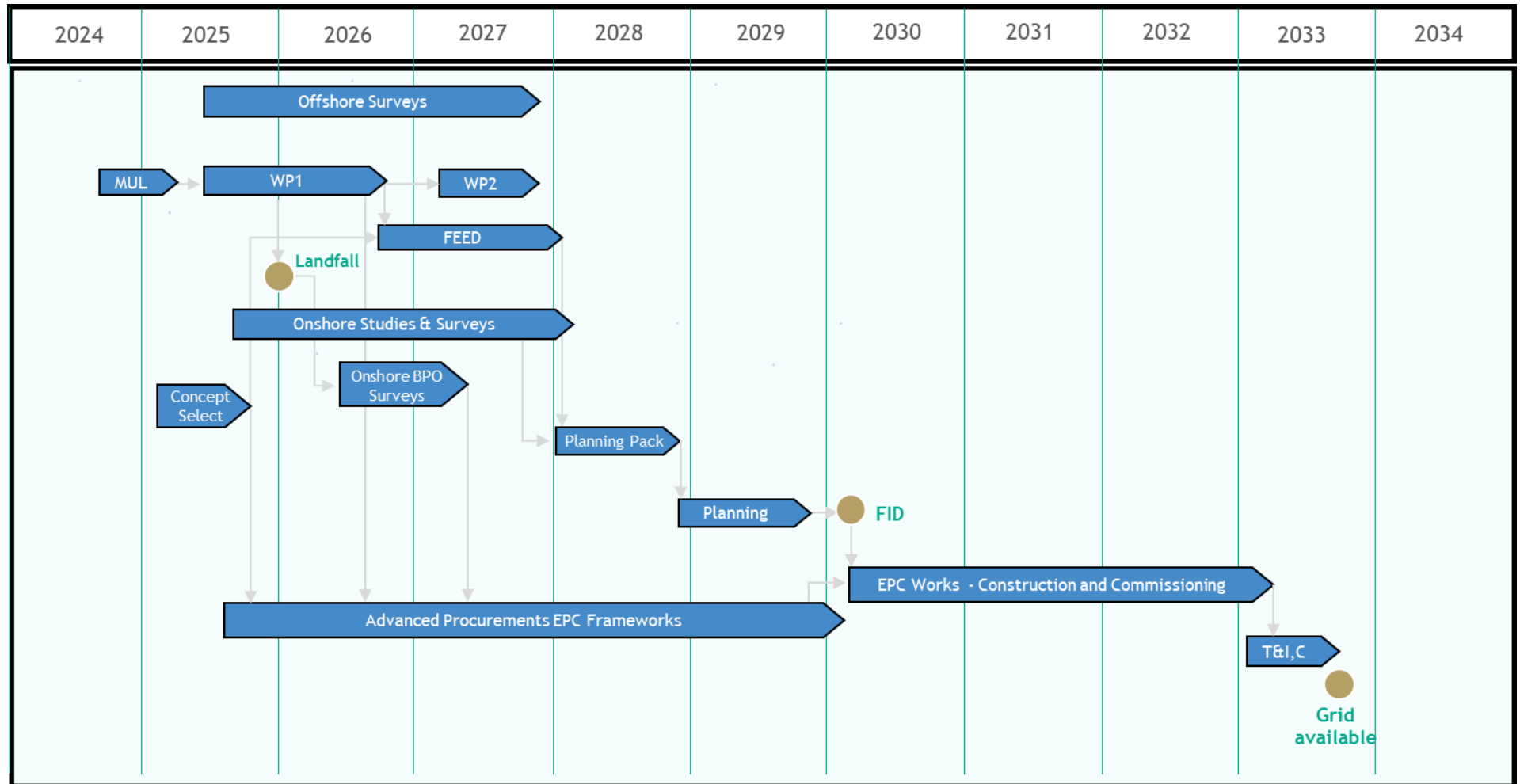
Siobhan O'Shea

Siobhán O'Shea

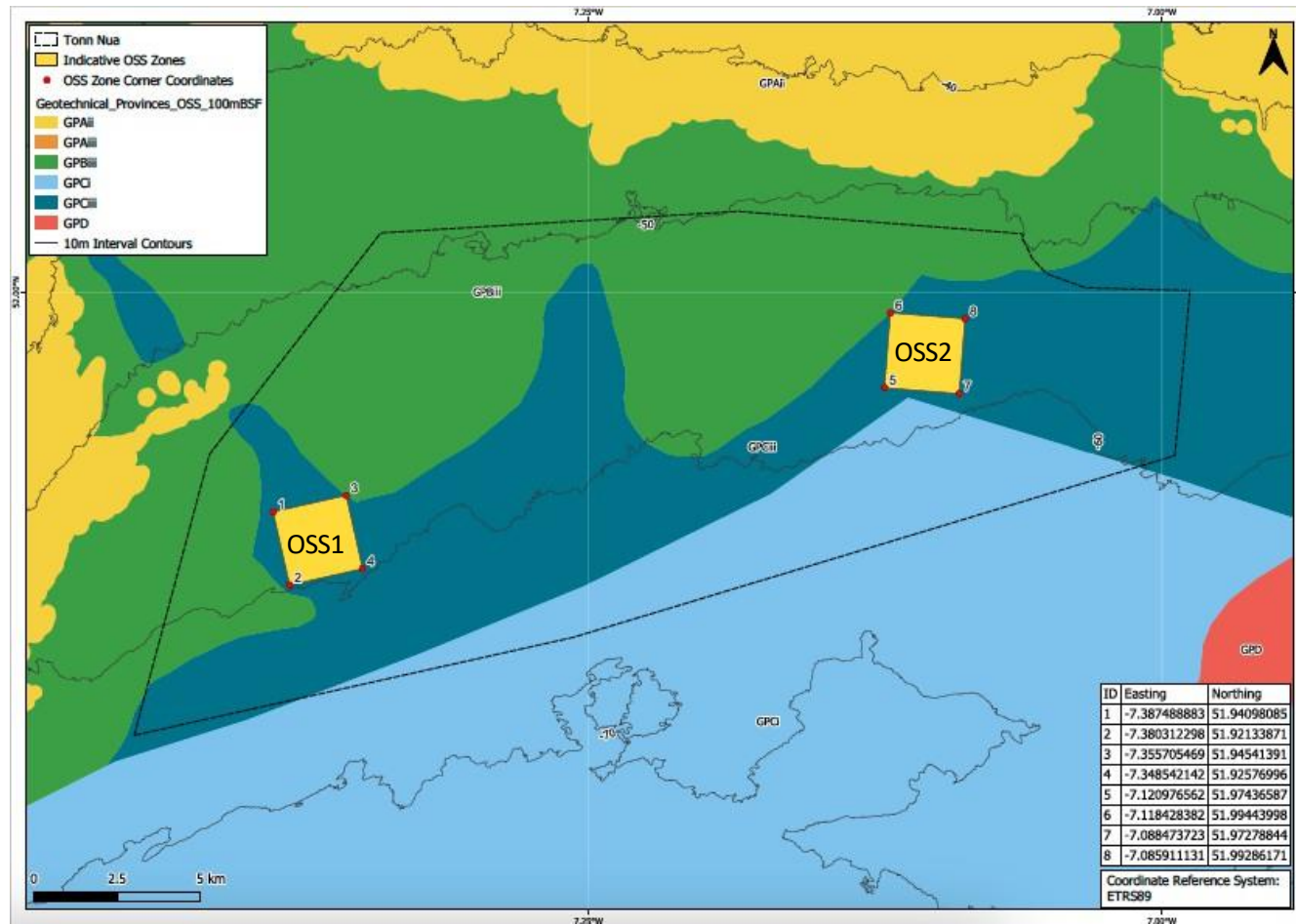
Chief Infrastructure Officer Onshore (Interim)

EirGrid plc

Appendix 1 – Indicative Level 0 Schedule

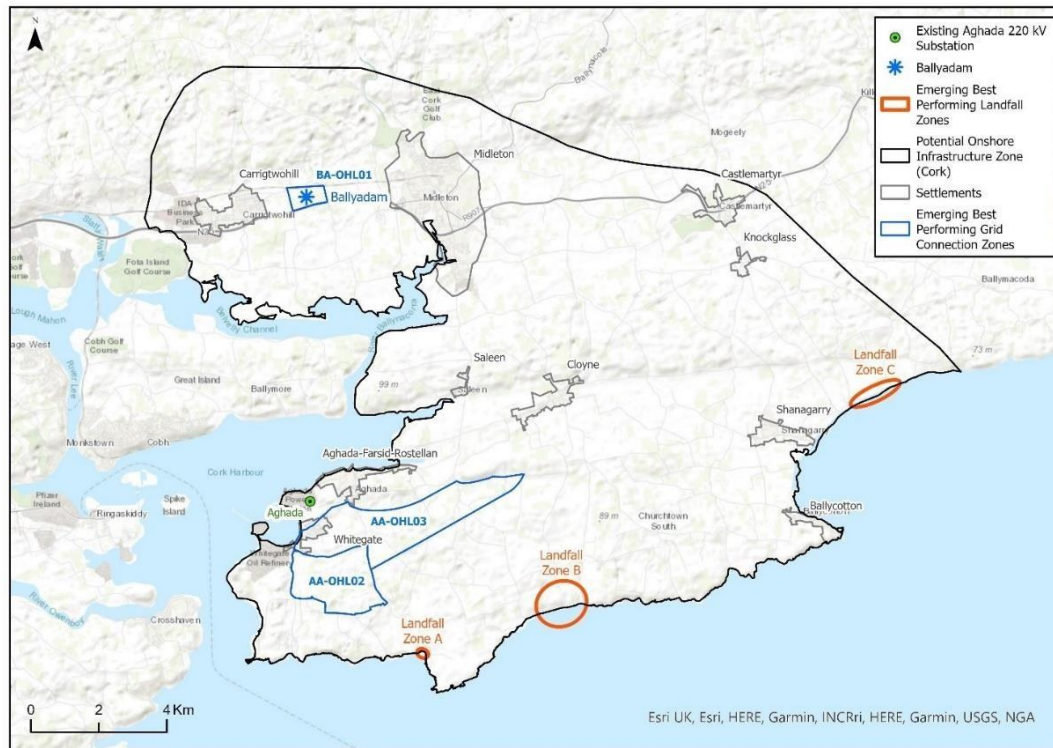


Appendix 2 – Provisional Offshore Substation Zones



Appendix 3 – Landfall & Grid Connection Zones

3.1 – Emerging Best Performing Zones (Cork Area)



Landfall Zones	Description
Landfall Zone A	Located within the townlands of Ballintra East, Inch and Lahard.
Landfall Zone B	Located within the townlands of Shanahee Ballybranagan, Ballycroneen West, Ballyrobin South and Ballycroneen East.
Landfall Zone C	Located within the townlands of Garryvoe Lower, Ballybutler and Ballycrenane.

3.1.1 Emerging Best Performing Grid Connection Zones (Cork):

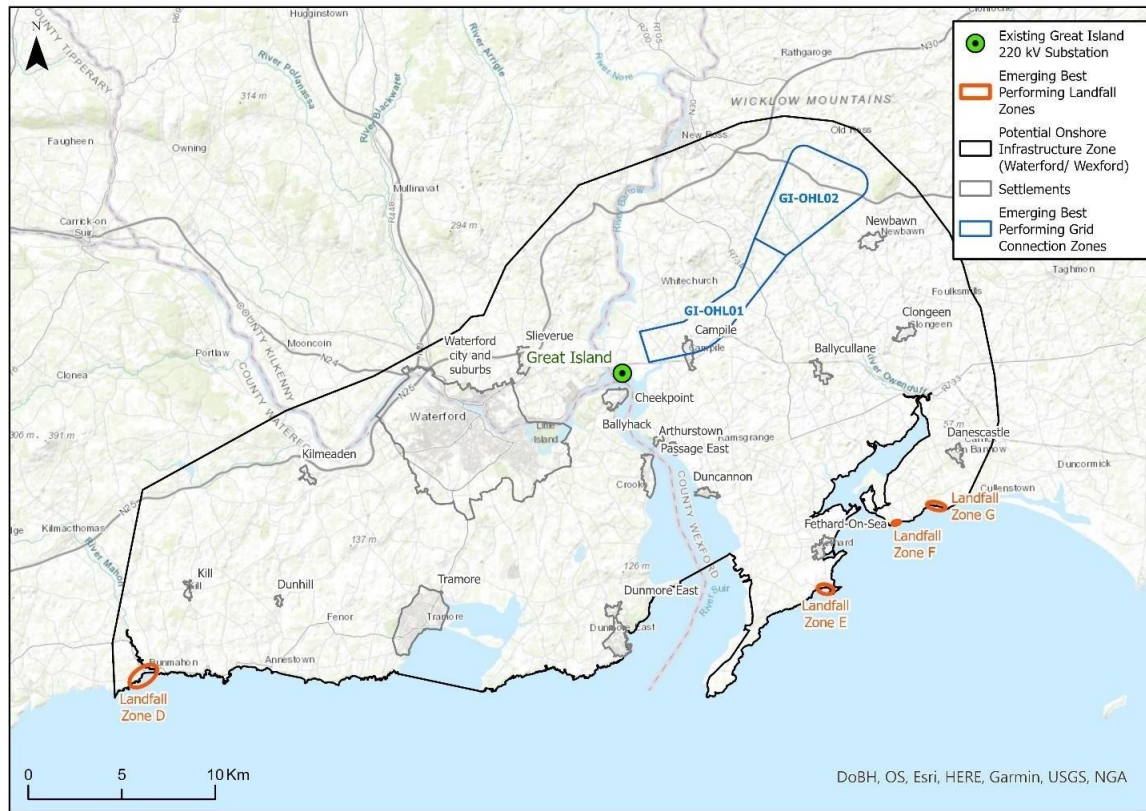
The Areas of Focus for Grid Connection Zones are in proximity to:

- AA-OHL Zone: Loop-in to Aghada - Knockraha 220 kV double OHL in County Cork.
- BA-OHL Zone: Loop-in to Ballyadam OHL in County Cork.

Emerging Best Performing Grid Connection Zones (Cork)

Grid Connection Zones	Description
AA-OHL02 (County Cork)	Aghada Loop-in Zone 2
AA-OHL03 (County Cork)	Aghada Loop-in Zone 3
BA-OHL01 (County Cork)	Ballyadam Loop-in Zone 1

3.2 - Emerging Best Performing Zones (Wexford)



Landfall Zones	Description
Landfall Zone D	Located within the townlands of Knockmahon, Templeyvrick, Ballynasissala and Ballynagigla.
Landfall Zone E	Located within the townland of Ramstown.
Landfall Zone F	Located within the townland of Bannow.
Landfall Zone G	Located within the townlands of Blackhall, Haggard, Ballymadder, Loftusacre.

3.2.1 Emerging Best Performing Grid Connection Zones (Wexford):

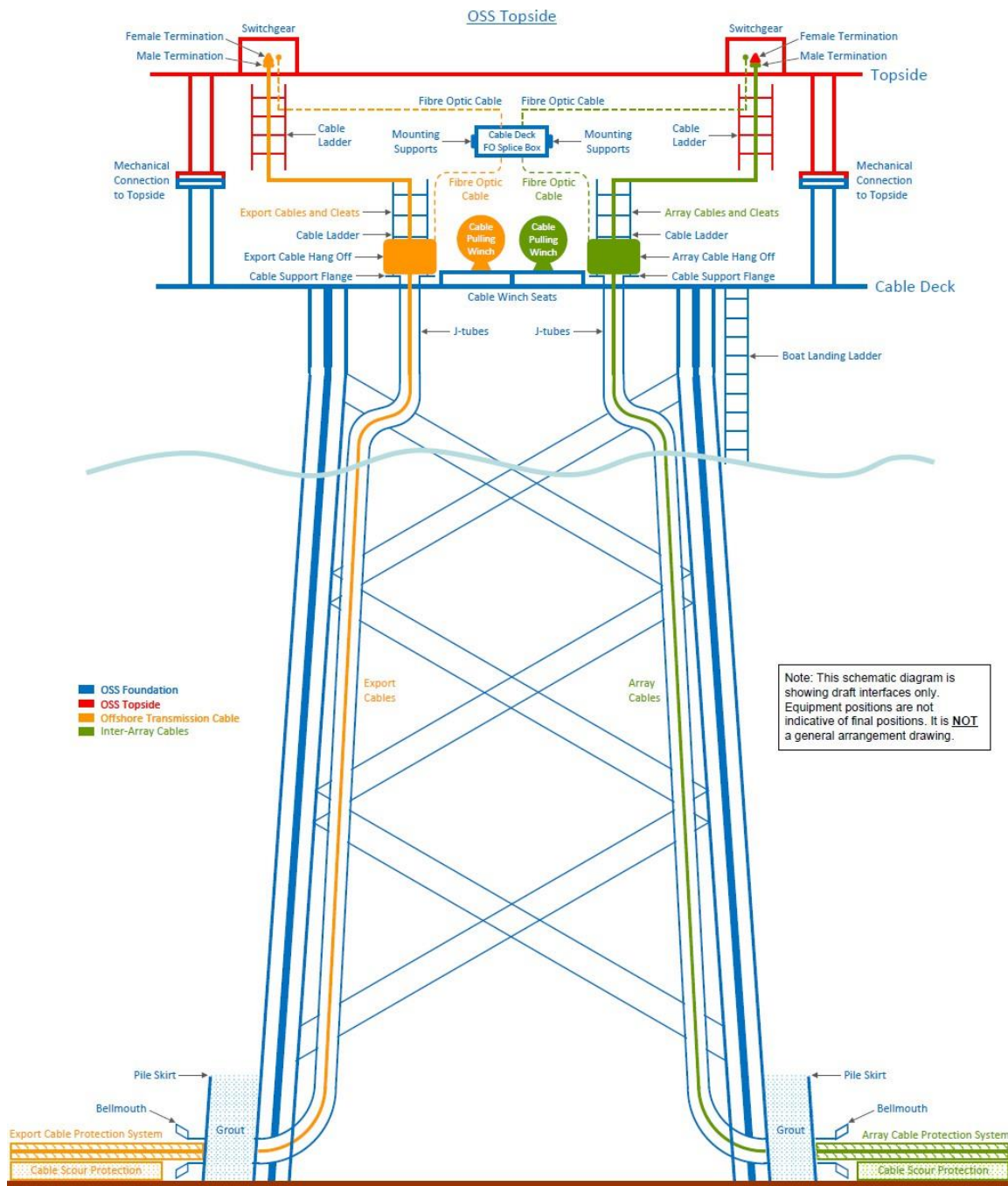
The Areas of Focus for Grid Connection Zones are in proximity to:

- GI-OHL Zone: Existing Great Island 220 kV Substation, Great Island – Kellis 220 kV OHL and Great Island – Lodgewood 220 kV OHL in County Wexford.

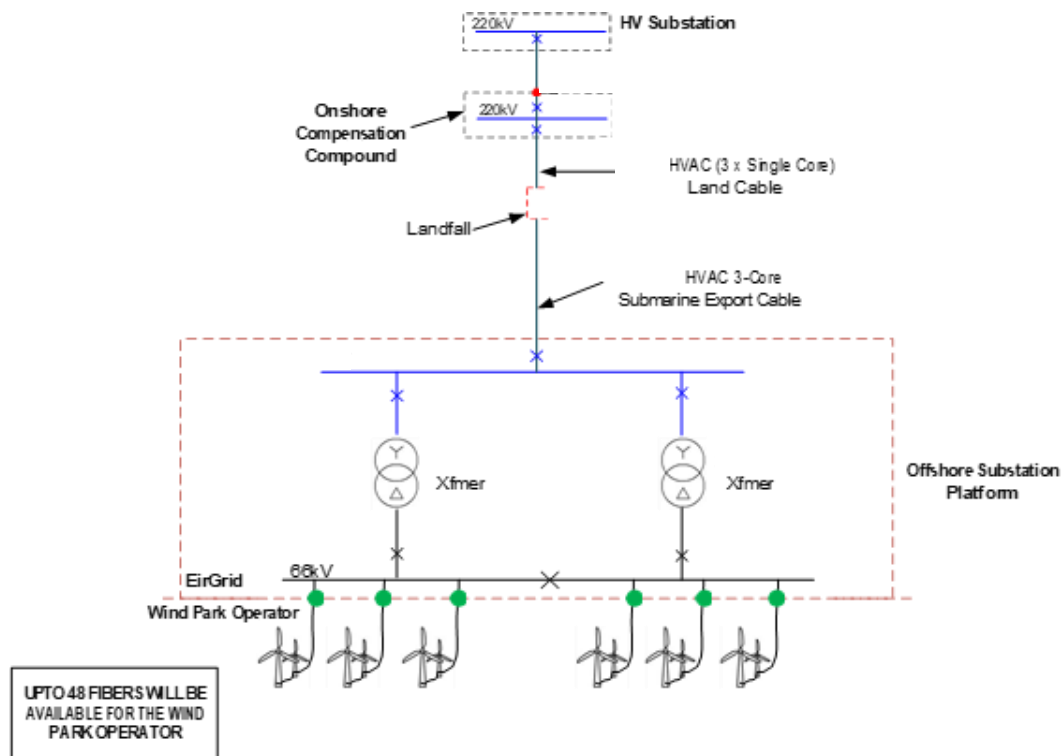
Emerging Best Performing Grid Connection Zones (Wexford)

Grid Connection Zones	Description
GI-OHL01 (County Wexford)	Great Island Direct Connection Zone 1
GI-OHL02 (County Wexford)	Great Island Direct Connection Zone 2

Appendix 4 – Proposed High Level Equipment Requirements at the Offshore Platform



Appendix 5 – Offshore Connection Point



Appendix 6 – Risk Register

Open Risks	Closed Risks	Actions Allocated	High Threats	Medium Threats	Low Threats	All Opportunities			
78	31	72	14	20	44	3			
Threats									
Risk ID	Title	Rank	Category	Prob	Cost	Time Score	Risk Event	Mitigations	
002	Limited Capacity in EU Supply Chain	1	Construction	4	5	5	20	Limited Capacity (factory slots, yard availability etc) in supply chain to meet our target schedule	<ul style="list-style-type: none">Early and timely market engagementEstablish early framework agreementsSecure critical supply early
015	Adverse weather during Offshore surveying	2	Surveying	4	5	4	20	Adverse Weather may be worse than expected during surveying works.	<ul style="list-style-type: none">Agree appropriate contractual provisions for weatherConsider suitable weather windows and reflect in scheduleUnderstand the limitations and workability.
028	Adverse weather during Offshore construction and commissioning	3	Construction	4	5	4	20	Adverse Weather may be worse than expected during construction and commissioning in Offshore.	<ul style="list-style-type: none">Set operation criteria for vessels.Define season for statistical better window.Proposed controls for each stage of construction included in the actions.
024	Timeframe Reaching agreements with requirements from statutory authorities	4	Engagement	4	1	4	16	Objection may exist from statutory authorities (County Councils) before planning submission.	<ul style="list-style-type: none">Statutory Stakeholder Management approach to be defined and adopted.Develop and maintain Stakeholder Management Plan that includes early engagement with statutory authorities.Master schedule to reflect key decisions etc from statutory stakeholders
094	Delays in obtaining Marine Usage Licence (MUL)	5	Approvals	3	3	5	15	Our MUL licence is delayed which results in delays to commencing marine surveys in 2025.	<ul style="list-style-type: none">Continuous liaison with MARA and DECC on MUL applicationUndertake scenario analysis to understand implications of a potentially delayed MULWork with Marine Survey Contractor on opportunities in a constrained schedule
066	Availability of heavy lift vessels for OSS Jacket	6	Procurement	3	5	3	15	Limited heavy lift vessel(s) available to meet schedule due to significant Global demand in Offshore wind.	<ul style="list-style-type: none">Continued dialogue with supply chain to understand constraints and opportunitiesConsider flexibility options for mobilisation of the vesselsReview potential design solutions and opportunities to overcome this potential challenge
033	Archaeological findings Offshore	7	Surveying	3	5	1	15	Archaeological artifacts identified and additional investigations may be required.	<ul style="list-style-type: none">Consideration of existing archaeological dataAnalyse large corridorEngagement with relevant stakeholders
058	Judicial review to statutory decisions MUL/Planning	8	Approvals	3	5	5	15	A Judicial Review (JR) may be taken on any of the statutory decisions (license /MAC /Planning Applications /NISs/EIA/Annex IV)	<ul style="list-style-type: none">Arrange Legal Review on all key relevant documentationUndertake schedule scenario analysis to understand potential implications
058	Scope changes during concept Stage	9	Design	4	3	2	12	Scope changes may occur which cause abortive design and revisit consents in concept stage in offshore	<ul style="list-style-type: none">Develop an agreed 'Basis of Design' and confirm in a 'Scope Book'Robust change control processes to assess impact prior to implementing changeContinuous briefings with relevant key stakeholders
080	Timing of Interface with OWF developer	10	Interfaces	3	4	4	12	Project requires information or clarifications from OWF developer to complete the design. Misalignment in Consenting preparation.	<ul style="list-style-type: none">Develop Collaboration Agreement between EirGrid and successful OWF DeveloperClear engineering requirements and Interface MatrixAligned schedule with successful developer identifying information required points
Opportunities									
Risk ID	Title		Category	Prob	Cost	Time Score	Risk Event	Mitigations	
016	PCI funding		Financial	3	-5	-15	Opportunity to obtain PCI Status which may provide opportunities for grant funding and potentially accelerated consenting	PCI funding application submitted November 2024	
022	Use data from Marine Institute (MI) surveys in our proposed areas of interest		Surveying	3	-3	-2	-9	Opportunity to use the survey information MI have collected to inform our proposed survey campaigns - potential to reduce extent of our Geotechnical surveys?	Assess opportunity to align with our scope

Appendix 7 – Information Required from OWF to the Company

As part of the Company's engagement with the successful Tonn Nua OWF Developer, the Company will introduce and manage an 'Information Required Schedule' to capture key information required from both parties. This Information Required Schedule will be shared with the successful OWF post auction, however the following sections are intended to inform the OWF's at bid stage to the information that the Company will require and the phasing of this information.

7.1.1 Design Inputs Required from OWF – 1-Month Post Auction Reward

Following the auction, the successful OWF will be required to have a detailed technical engagement with the Company in Q1 2026 to commence the co-ordination of the interface between OWF and the Company's transmission system. The information listed below (or confirmation of assumption made by the OWF to inform their bid) will be required from the OWF information to assess feasibility of integration of OWF to the Company OSS:

Ref	Interface	Target Date	Description
1.1	Inter Array Cable ("IAC") Data	Q1 2026	OWF to advise of current designs and assumptions for IAC including physical and electrical characteristics.
1.2	OWF Supervisory Control and Data Acquisition ("SCADA")	Q1 2026	OWF to advise of designs and assumptions for OWF rooms, metering arrangements etc.
1.3	Subsea/Substructure interface	Q1 2026	OWF to advise of bid assumptions for cable protection system ("CPS"), scour protection and substructure interface.
1.4	IAC Field Layout	Q1 2026	OWF to advise of WTG quantities and sizes that will be connecting at OSS to allow commencement of coordination of IAC routes with exclusion zones and export cable route.
1.5	OWF Basis Electrical Information	Q1 2026	Provision of OWF basic technical data for the basic design studies. (SLD, PQ capability curves, WTG transformer data <u>and</u> any more detailed information which might be available at that point)
1.6	Cumulative Impact Assessment Co- ordination	Q1 2026	Cumulative impact assessment approach for the OWF and PUOSC Project to ensure alignment on methodology.

7.1.2 Design Inputs Required from OWF – Milestone 2 – Input to the Front End Engineering Design (“FEED”)

Inputs from the OWF successful in the auction will be required to allow the Company FEED to be completed based on the design input of the OWF:

Ref	Interface	Target Date	Description
2.1	Inter Array Cable Data	Q3 2026	Includes information around the OWF IAC including physical dimensions, cross sectional area (“ CSA ”), short circuit (“ SC ”) capability.
2.2	IAC field layout	Q3 2026	OWF field layout to determine Inter Array Cable route to OSS and co-ordination with export cable route and OSS exclusion zones.
2.3	IAC Installation requirements	Q3 2026	Requirements for mounting structures for cable pull-in equipment (pad-eyes, deck strengthening); winch specification (position, base, forces)
2.4	Topside and jacket physical interfaces	Q3 2026	Confirmation of OWF design intention on CPS, bellmouth, hang offs and other physical interfaces along with review of Company design for J-tube etc.
2.5	OWF SCADA room layout	Q3 2026	Review of developed OWF SCADA room on OSS to ensure OWF design is compatible with OSS design.
2.6	Electrical models	Q3 2026	Provision of root mean square (“ RMS ”) model for load flow and transient stability studies. Provision of harmonics data and model for harmonic performance and stability studies.
2.7	Miscellaneous	Q3 2026	Other miscellaneous design interfaces including: Metering circuits / fibre split box details / POB during installation and operation.

7.1.3 Design Inputs Required from OWF – Milestone 3 – Detailed Design

It is noted that interface between the OWF and the Company will need to be defined in detail prior to either party commencing detailed design. The inputs from either part will be established through each parties FEED stage, however the below activities are a non-exhaustive list of interface items:

- Fibre optic network details including OCC and OSS patch panel details
- Submarine cable routes and co-ordination with OSS exclusion zones
- IAC control & protection design including interlocking
- Cable protection system and scour protection interface
- Bellmouth and hang off design
- IAC design including thermal performance
- IAC pull in provisions
- Pre-installed pull in design
- Pull in equipment
- Cable installation and T&T programme
- Certification information
- RMS and EMT models for system studies
- Signal lists
- Confirm details of all equipment to be installation on OCC. Including but not limited to:
- Bellmouth, CPS, SCADA cabinets, metering
- Crossing agreements / proximity agreements
- Compliance activities

7.1.4 Confirmation of Delivery Dates of OWF Equipment to OSS Fabrication Yard

The OWF will be responsible for provision of all equipment required for the installation and operation of the OWF. The Company will work with the successful OWF to establish what items need to be installed on the OSS, with the objective of achieving the most efficient overall approach. If the OWF required equipment to be installed as part of the OSS fabrication, the OWF will need to provide all equipment in line with the Company's programme for OSS fabrication. These items may include, but are not limited to, cable accessories (hang off clamps, J tube belmouths, etc), SCADA and telecoms equipment (cabinets etc), and any other ancillary items. If the OWF cannot provide the OWF equipment to be installed on the OSS in line with the Company's programme, the OWF will be responsible for the offshore transportation and installation of OWF equipment to the OSS.