



An Coimisiún
um Rialáil Fóntas
**Commission for
Regulation of Utilities**

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Offshore Grid Connection Pathway – Phase 2

Proposed Decision

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CRU Strategic Plan 2022-24

Our Mission <ul style="list-style-type: none">• Protecting the public interest in water, energy, and energy safety.	Our Strategic Priorities <ul style="list-style-type: none">• Ensure Security of Supply• Drive a Low Carbon Future• Empower and Protect Customers• Enable our People and Organisational Capacity
Our Vision <ul style="list-style-type: none">• Safe, secure, and sustainable supplies of energy and water, for the benefit of customer now and in the future.	

Executive Summary

This paper outlines CRU's proposed decision on the grid access requirements for Phase 2 offshore wind projects and the obligations on EirGrid when facilitating access to the transmission network. The paper also considers the pathway for Phase 1 projects that do not hold an ORESS 1 Notice of Award.

In developing this proposed decision, the CRU has sought to strike a balance between allocation of a scarce resource (transmission grid capacity) and the target of delivering increased offshore wind. The CRU has also developed this paper on the basis that all projects should have equal opportunity to connect to the grid regardless of their route to market.

Context

Ireland has a government target to install at least 5 GW capacity of offshore wind generation by 2030. This will require the development of a new offshore electricity grid. Given that, the CRU is developing a regulatory framework and supporting regulatory policies for the new offshore electricity transmission grid to support this ambition. This includes policies such as:¹

- **generator connection and access policy** (the subject of this paper);
- charging and cost allocation;
- the economic regulation of the offshore TSO and asset owner;
- licensing and authorisation;
- offshore network planning and standards; etc.

The CRU has developed regulatory policy for Phase 1 to support and facilitate offshore projects participating in the Government's ORESS 1 auction. ORESS 1 concluded in June 2023, where 3,074 MW of new offshore capacity was awarded.² The route to grid for Phase 1 projects was secured via a provisional [Grid Connection Assessment](#) (GCA) and success in the ORESS 1 auction. The CRU notes that the GCA was developed and issued for Phase 1 offshore wind projects only.

Phase 2 seeks to enable offshore wind projects to connect generation capacity to contribute

¹ But not limited to.

² [EirGrid, Renewable Electricity Support Scheme – ORESS 1 Final Auction Results, 14 June 2023.](#)

of the delivery of the remaining generation capacity needed to meet the 5 GW target. The Department for Environment, Climate and Communications (DECC) is separately consulting on the qualification criteria and the terms and conditions of the ORESS 2 auctions.³ Phase 2 will be plan-led⁴. DECC is also currently consulting on the South Coast Designated Maritime Area Plan (DMAP) proposal⁵.

In developing this proposed decision, the CRU has considered the differences in auction design and consenting requirements between Phase 1 and Phase 2. The proposed decisions in this paper are split into 2 sections:

1. Grid access for Phase 2 projects; and
2. Grid for Phase 1 projects that do not hold an ORESS 1 Notice of Award.

The requirements for grid access are summarised in the table below. Full details of the proposals are outlined in this paper. At a high level the paper introduces a clear pathway and stages⁶ by which an offshore wind project can secure grid access. The paper also sets out the obligations on EirGrid for facilitating grid access to the transmission system.

The paper proposes that all offshore wind projects must be in receipt of the following before they are eligible to request a full grid connection offer and execute that offer and connect to the transmission system.

- Marine Area Consent;
- Route to Market;
- Final planning consent from An Bord Pleanála.

An offshore project does not hold any right to grid until it has executed the grid connection agreement. The connection agreement will only be issued after the above requirements have been met.

³ [Department of Environment, Climate and Communications, Offshore Renewable Electricity Support Scheme Phase Two Consultation Document, July 2023.](#)

⁴ EirGrid will develop the offshore grid.

⁵ [South Coast Designated Maritime Area Plan \(DMAP\) Proposal - 1 August 2023.](#)

⁶ Grid Feasibility Scenario, Indicative Connection Offer, Full Connection Offer.

Table 1: Pathway to Grid Access (Phase 2 Policy).

Pathway to Grid Access (Phase 2 Policy)	
<p><u>Phase 2 Projects</u></p> <p><u>Pathway to Grid Access:</u></p> <p>Pre ORESS 2 Auction:</p> <ul style="list-style-type: none"> • EirGrid to issue <u>Grid Feasibility Scenario(s) (GFS)</u>. <p>Post ORESS 2 Auction:</p> <ul style="list-style-type: none"> • Following success in ORESS 2 Auction successful project can apply to EirGrid to receive an Indicative Connection Offer (ICO). <ul style="list-style-type: none"> ▪ Can be progressed in parallel with MAC application. <u>It should be noted that if MAC application is unsuccessful, project loses ICO, and grid application becomes invalid.</u> • Subject to gaining all necessary consents (outlined below) the project is eligible to request a Full Connection Offer from EirGrid: <ul style="list-style-type: none"> ▪ ORESS Notice of Award (if applicable); ▪ Maritime Area Consent Granted; and ▪ Final planning consent from An Bord Pleanála. 	<p><u>Phase 1 Projects</u>⁷</p> <p><u>Pathway to Grid Access:</u></p> <p>Proceed as Phase 1 Merchant Project and comply with requirements below:</p> <ul style="list-style-type: none"> • Phase 1 projects GCA valid <u>until end July 2024</u> only subject to meeting the conditions below: <ul style="list-style-type: none"> ▪ Project submits planning application to An Bord Pleanála no later than backstop date in MAC (<u>i.e., end June 2024</u>); and ▪ Project confirms a Route to Market to the satisfaction of the MAC Grantor (i.e., MARA) before the deadline (<u>i.e., end July 2024</u>). • Following meeting the above requirements the Phase 1 Project can apply to EirGrid for a Full Connection Offer (FCO). <p><u>Note: Should the MAC become invalid at any stage during this period the GCA becomes invalid also.</u></p>

For the purposes of this proposed decision paper, the CRU refers to any offshore project seeking to connect without a state subsidy (i.e., without ORESS support), as a ‘merchant project’, regardless of how the business case of that project is comprised (e.g., requiring a CPPA).

⁷ Phase 1 projects refers to projects which has a valid GCA and do not hold an ORESS 1 Notice of Award.

It should be noted that the grid access pathways for Phase 2 offshore wind projects and Phase 1 projects that do not hold an ORESS 1 Notice of Award are the subject of this consultation. The CRU reserves the right to publish separate decisions in relation to the grid access pathways for Phase 2 offshore wind projects and Phase 1 projects that do not hold an ORESS 1 Notice of Award. These decision(s) are expected to be published by the end Q4 2023.

The CRU welcomes views from all interested parties on this proposed decision. The responses should be submitted via email by close of business on Friday, 22 September 2023 to offshoreeconomicpolicy@cru.ie.

Public / Customer Impact Statement

Ireland has a target to install at least 5 GW capacity of offshore wind generation by 2030. This will require the development of a new offshore electricity grid.

The CRU will develop regulatory policies for the new offshore electricity transmission grid. This will include policies for connecting new offshore generation to this grid.

The following points set out the impact of connecting this generation can have on consumers:

Reliability of supply.

New generator connections increase the amount of electricity that can be generated to meet and exceed the demand for electricity. Therefore, new generator connections support security and reliability of supply.

Environmental and climate action goals.

Increasing electricity generated from renewable sources such as offshore reduces the carbon-intensity of the energy sector.

Wholesale electricity prices.

The connection of more efficient generation such as new offshore wind generation increases competition. This puts downward pressure on wholesale prices, one of the main components of a consumer's bill.

Network costs.

Generators initially fund the local costs of connecting to the grid network, reducing the cost risk to consumers through network charges. This cost may increase the PSO levy if it is bid by generators into support auctions, or the cost could be carried by a corporation if the generator agrees a Corporate Purchase Power Agreement.

Consumers pay for wider reinforcement works, through network charges, that allows generators full access to the network. This full access increases the benefits to electricity consumers outlined above.

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Glossary of Abbreviations and Terms

Abbreviation or term	Definition or meaning
1999 Act	Electricity Regulation Act, 1999
ABP	An Bord Pleanála
CPPA	Corporate Power Purchase Agreements
CRU	Commission for Regulation of Utilities (formerly, Commission for Energy Regulation)
DECC	Department of the Environment, Climate and Communications
DHLGH	Department of Housing, Local Government and Heritage
DMAP	Designated Marine Area Plan
DSO	Distribution System Operator (ESB Networks)
ECP	Enduring Connection Policy
Electricity system	Transmission and distribution electricity systems
FCO	Full Connection Offer
FIP	Feed In Premium
GCA	Grid Connection Assessment
GFS	Grid Feasibility Scenario
GPA	Group Processing Approach
GW	Gigawatt
ICO	Indicative Connection Offer
kW	Kilowatt
MAC	Marine Area Consent
MARA	Marine Area Regulatory Authority
MEC	Maximum Export Capacity
MW	Megawatt
Non-GPA	Non-Group Processing Approach
ORESS	Offshore Renewable Electricity Support Scheme

RED	Renewable Energy Directive
SOs	System Operators (i.e., TSO and DSO)
TSO	Transmission System Operator (EirGrid)
TUoS	Transmission Use of System charges

1. Introduction

In March 2023, the Department for Environment, Climate and Communications (DECC) published its policy statement on the framework for Phase 2 offshore wind⁸. It builds on [the 2021 Climate Action Plan](#) and sets out several commitments. Among others, it re-affirms the Government's position to accelerate offshore wind deployment and to reach at least a target of 5 GW of installed offshore wind capacity in Ireland by 2030. To facilitate this level of development by 2030, the DECC has developed a support scheme referred to as the Offshore Renewable Electricity Support Scheme (ORESS). ORESS is a two-way floating Feed in Premium (FIP)⁹, which is run via an auction with its associated terms and conditions as determined by the DECC prior to the start of the auction.

ORESS 1 concluded in June 2023, where 3,074 MW of capacity was awarded.¹⁰ This first phase was developer-led, with participants competing for subsidy on projects which had secured provisional grid access in the form of a [Grid Connection Application](#) (GCA). The second phase will contribute of the delivery of the remaining generation capacity to meet the 5 GW target. The DECC is separately consulting on the ORESS 2 auction design.¹¹

This CRU proposed decision is on the grid access requirements for all offshore projects other than those successful in the ORESS 1 auction, i.e., Phase 2, Phase 1 projects that do not hold an ORESS 1 Notice of Award, i.e., merchant through a CPPA. Additionally, it sets out the obligations on EirGrid for facilitating grid access to the transmission system.

1.1 Legal Context

Under section 34 of [the Electricity Regulation Act 1999](#), as amended (the 1999 Act), the CRU may give directions to the transmission system operator (TSO) and distribution system operator (DSO), collectively the "system operators" (SOs) on the terms and conditions of access to the distribution and transmission system. Specifically, section 34 (2) (c) of the 1999 Act provides that the CRU's directions may provide for "the terms and conditions upon which

⁸ [Department of Environment, Climate and Communications, Accelerating Ireland's Offshore Energy Programme – policy statement on the framework for phase two offshore wind, March 2023.](#)

⁹ Feed In Premium is a scheme, whereby a subsidy is calculated by comparing the project awarded strike price with the hourly market reference price. It is referred as two-way, as there are supporting payments when the strike price exceeds market reference price. There are also difference payments, when the market reference price exceeds the strike price in the form a payment from the supplier.

¹⁰ [EirGrid, Renewable Electricity Support Scheme – ORESS 1 Final Auction Results, 14 June 2023.](#)

¹¹ [Department of Environment, Climate and Communications, Offshore Renewable Electricity Support Scheme Phase Two Consultation Document, July 2023.](#)

an offer for connection to the transmission or distribution system is made”.

The CRU's functions and duties are set out principally in section 9 of the 1999 Act. In particular, according to section 9 (4) (a) of the 1999 Act, the CRU shall carry out its statutory functions in a manner which does not discriminate unfairly between relevant stakeholders, and also have regard, among other things, to the need to:

- protect the interests of final customers and to secure that all their reasonable demands for electricity are satisfied;
- promote the continuity, security, and quality of supplies of electricity;
- promote competition; and
- promote efficiency and the use of renewable, sustainable, or alternative forms of energy.

The CRU is mindful of these responsibilities in relation to decisions it makes on connection policy issues. Furthermore, the CRU takes account of the requirements of European legislation related to the internal market in energy. This includes the Third Energy Package ([Directive 2009/72/EC](#), [Regulation 714/2009](#)), the Clean Energy Package for all Europeans (including [Directive 2019/944](#), [Directive 2018/2001](#) and [Regulation 2019/943](#)) and the EU Network Codes and Guidelines.

The CRU has regard for Article 16 of the RED II Directive¹² includes the following requirements for the permit granting process (including planning and grid related permits):

“The permit-granting process ... shall not exceed two years for power plants, including all relevant procedures of competent authorities.”

1.2 Background to Offshore Connection Application Processing

1.2.1 Connection Pathways

The process and policy for offshore grid connection applications is a separate connection to the connection pathways for onshore (i.e., [Enduring Connection Policy ECP- 2](#)) generators,

¹⁰ [Directive \(EU\) 2018/2001](#) of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast).

storage and other system services technology projects, including interconnectors.

Connection policy is set in the context of a “live” system in which there is an overriding requirement for the system operators to operate a safe, secure, and reliable transmission and distribution system. At times it may be necessary for the TSO to require amendments or action outside regular processes to maintain system adequacy. Any such action should be reasonable in the context of system requirements and would be subject to the CRU’s approval.

1.2.2 Offshore Phase 1 – National Policy Context

The national policy context for offshore Phase 1 projects includes the following:

- The DECC “Policy Statement on the Framework for Ireland’s Offshore Electricity System”¹³ (herein described as “DECC’s offshore grid model”) which details the role of EirGrid as the system operator and asset owner of Ireland’s offshore electricity transmission system (the Offshore TSO)¹⁴.
- The Maritime Area Planning (MAP) Bill, that was initiated and published by the Department of Housing, Local Government and Heritage (DHLGH) on 12 August 2021¹⁵. The MAP Bill includes the processes for acquiring and maintaining a Maritime Area Consent for Offshore Renewable Energy projects.
- The first Offshore Renewable Electricity Support Scheme (ORESS 1). The Terms and Conditions of ORESS 1 were published by DECC¹⁶ in November 2022.

1.2.3 Offshore Phase 2 – National Policy Context

The national policy context for offshore Phase 2 projects includes the following:

- The DECC “Policy Statement on the Framework for Phase Two Offshore Wind” which provides clarity for all stakeholders regarding the development of offshore wind as Ireland moves to the enduring, plan led, offshore regime.¹⁷
- The DECC consultation “ORESS Auction Design” which requests stakeholder

¹³ [Policy Statement on the Framework for Ireland's Offshore Electricity Transmission System - 13 May 2021.](#)

¹⁴ Transmission system assets to be owned by EirGrid will include the high voltage transmission circuits and associated onshore and offshore transmission infrastructure connecting offshore generation sites to the existing onshore transmission system, as well as any necessary offshore reinforcements to accommodate electricity flows.

¹⁵ [Maritime Area Planning Act 2021 - 23 December 2021.](#)

¹⁶ [Terms and Conditions for the First Offshore Wind ORESS Competition - 5 April 2023.](#)

¹⁷ [Policy Statement on the Framework for Phase Two Offshore Wind - 10 March 2023.](#)

feedback on aspects of auction design to help ensure ORESS 2 auctions are attractive to the offshore wind industry, deliver a route to market for significant amounts of clean renewable energy and ensure value for money for electricity consumers.

- South Coast Designated Maritime Area Plan (DMAP) Proposal July 2023. Following establishment of a South Coast DMAP, Government will seek to procure up to 900 MW of offshore wind capacity within this maritime area via Ireland's next competitive offshore wind auction, known as ORESS 2.1, which will commence in late 2023 or early 2024. This will align with current available onshore grid capacity that is required to integrate offshore wind generation to the onshore grid.

1.3 Purpose of Paper

The purpose of this paper is to present the CRU's proposed decision on the grid access requirements for all projects in Phase 2, Phase 1 projects that do not hold an ORESS 1 Notice of Award and sets out the obligations on EirGrid when facilitating grid access to the available capacity.

This CRU proposed decision is applicable to the Phase 2 projects and Phase 1 projects that do not hold an ORESS 1 Notice of Award, particularly to the extent that they impact Phase 2 projects. This proposed decision will not necessarily mean that any future Phases, i.e., Phase 3, will require the same pre-requisites. The grid access requirements and pre-requisites for future offshore phases will be decided in line with evolving national policy for offshore renewable energy and long-term grid planning.

This paper is structured as follows:

- Section 1** Introduction to the context of this proposed decision on the grid access requirements for Phase 2 and Phase 1 projects that do not hold an ORESS 1 Notice of Award.
- Section 2** Sets out the grid access requirements for all projects other than those successful in the ORESS 1 auction, i.e., Phase 2 projects, Phase 1 projects that do not hold an ORESS 1 Notice of Award, i.e., merchant through a CPPA, and the obligations on EirGrid in respect of facilitating grid access.

Section 3 Details the treatment of network capacity between potential Phase 2 bidders and projects developed without ORESS (including Phase 1 projects that do not hold an ORESS 1 Notice of Award).

Section 4 Provides the next steps for views to this proposed decision.

1.4 Related Documents

This proposed decision should be read in conjunction with the following CRU documents on offshore connection application processing.

Table 2: Related policy documents.

CRU202361	<i>Independent Technical Advisor – Offshore Phase 1 - Update</i>	Information Note
CRU202313	<i>Offshore Grid Connection Assets Treatment – Phase 1</i>	Supplemental Decision
CRU202309	<i>Offshore Grid Connection Assets Treatment – Phase 1</i>	Decision
SEM-23-004	<i>Firm Access Methodology in Ireland</i>	Decision
CRU2022968	<i>Offshore Connection Policy – Phase 1</i>	Decision
CRU202214	<i>Grid Connection Assessment (GCA) – Offshore Phase 1</i>	Decision
CRU21112a	<i>EirGrid study “Offshore Phase 1 Projects – Grid Connections Assessment”</i>	Study
CRU20020	<i>Offshore Wind Grid Delivery</i>	Direction letter
SEM-15-071	<i>Process for the calculation of Outturn Availability</i>	Decision

2. Phase 2 Offshore Grid Connections

Summary

The following section sets out the grid access requirements for Phase 2 projects. This section introduces a clear pathway and stages¹⁸ by which an offshore wind project can secure grid access. The paper also sets out the obligations on EirGrid for facilitating grid access to the transmission system.

In this section the CRU introduces new concepts along the pathway to grid to a full connection offer. Those being:

- Grid Feasibility Scenario(s) (GFS) – may include variables such as¹⁹ differing connection points, asset boundaries, network capacities and etc. This is provided by EirGrid to offshore projects pre ORESS 2 auction.
- Indicative Connection Offer²⁰ (ICO) – will include information similar to GFS but will have a chosen connection point. This stage comes after the auction and the preferred bidder moves forward to Full Connection Offer (FCO).

The paper also proposes that offshore wind projects must be in receipt of the following before they are eligible to request a FCO and execute that offer and connect to the transmission system.

- Marine Area Consent
- Route to Market
- Final planning consent from An Bord Pleanála

An offshore project does not hold any right to grid until it has executed the grid connection agreement. The connection agreement will only be issued by EirGrid after the above requirements have been met.

Full details of the proposed decision are outlined in Section 2 below.

¹⁸ Grid Feasibility Scenario, Indicative Connection Offer, Full Connection Offer.

¹⁹ But not limited to.

²⁰ ICO may include acceptance of 'some' T&Cs as well (i.e., it will be more formal than a GFS).

Table 3 - Pathway to Grid Access – Phase 2 projects

Pathway to Grid Access – Phase 2 projects
<p>Pre ORESS 2 Auction:</p> <p>EirGrid to issue <u>Grid Feasibility Scenario(s) (GFS)</u>.</p>
<p>Post ORESS 2 Auction:</p> <ul style="list-style-type: none">• Following success in ORESS 2 auction, the successful project can apply to EirGrid to receive an <u>Indicative Connection Offer (ICO)</u>.<ul style="list-style-type: none">▪ This can be progressed in parallel with MAC application. <u>It should be noted that if MAC application is unsuccessful, the project loses ICO and goes back to start of grid application process.</u>• Subject to gaining all necessary consents (outlined below) the project (i.e., ORESS 2 auction winner or merchant project) is eligible to request a <u>Full Connection Offer (FCO)</u> from EirGrid:<ul style="list-style-type: none">▪ ORESS Notice of Award (if applicable);▪ Maritime Area Consent Granted; and▪ Final planning consent from An Bord Pleanála.

Context

The DECC Policy Statement published in March 2023 re-affirms the Government’s position to accelerate offshore wind deployment and to reach at least a target of 5 GW of installed offshore wind capacity in Ireland by 2030. The first offshore auction (ORESS 1) was developed to contribute towards meeting this target and it was concluded in June 2023 awarding 3,074 MW of the aimed 5 GW total.

The second phase, which is referred to as Phase 2, follows Phase 1 and will contribute of the delivery of the remaining generation capacity needed to meet the 5 GW target. The CRU understand that Phase 2 is currently planned to have at least two auctions:

- **Phase 2.1** – is expected to procure from within the planned South Coast DMAP, 900 MW of fully grid-connected capacity across two separate offshore connections points, delivered by a single successful participant; and
- **Further Phase 2 auction/s** – are expected to contribute to the remaining capacity

to reach at least a target of 5 GW of installed offshore wind capacity in Ireland by 2030.

Whilst additional auctions in Phase 2 (e.g., Phase 2.3 etc.) are not currently planned at this stage, this will remain under review by the DECC with a view towards achieving the Government’s 2030 target. It should also be noted that there is a planned Phase 3 for floating offshore wind. Whilst Phase 3 grid access is not in the scope of this paper, the learnings and outcomes from Phase 1 and Phase 2 will support development of grid access policy for future phases, including Phase 3.

In obtaining grid access, the CRU considers that there is a balance between risk and certainty to be struck by the connections process for both applicants and the Irish consumer. At one extreme, Irish consumers could take most risk by providing the offshore project developer with a fixed cost of connection as part of the auction or other applicable process. The other extreme is to transfer this risk on to project developers by providing no information about a possible grid connection for auction participants to evaluate and include in their auction bids. There is also a myriad of options in between these two extremes; the CRU has considered a wide range of possibilities as part of forming this proposed decision.

2.1 Differences Between Phase 1 and Phase 2

Phase 1 was developer-led, with participant projects competing for a subsidy (ORESS) on projects which had secured provisional grid access in the form of a GCA. Phase 2 will be planned with developers competing to connect to a state selected site. Differences between Phases 1 and 2 (as summarised in Table 4) will impact how prospective offshore wind projects obtain a grid connection.

Table 4 - Summary table of main differences between Phase 1 and Phase 2.

Element	Phase 2	Phase 1
Designated Maritime Area Plan (DMAP)	<ul style="list-style-type: none"> • DMAPs to be published with prospective <u>projects restricted to geographical areas within the DMAP.</u> • Successful <u>bidders have exclusive development rights in the nominated area.</u> 	<ul style="list-style-type: none"> • No DMAPs and no restriction on where prospective projects could locate.
Marine Area Consents (MAC)	<ul style="list-style-type: none"> • <u>MACs to be obtained after ORESS auction</u> using a 	<ul style="list-style-type: none"> • MACs had to be obtained

<p>& Planning consent</p>	<p>priority process.</p> <ul style="list-style-type: none"> • Planning consent to be obtained within a defined time of the ORESS auction result using a priority process. 	<p>prior to the ORESS auction.</p> <ul style="list-style-type: none"> • Planning consent to be requested (<u>18 months from commencement of MAC</u>) and route to market secured within a defined timeframe (December 2025).
<p>Grid Evaluation & Development</p>	<ul style="list-style-type: none"> • EirGrid to provide Grid Feasibility Scenario(s) (GFS) for use by all potential Phase 2 bidders. • Defined MW capacity. • Development of offshore infrastructure to be EirGrid led. 	<ul style="list-style-type: none"> • Prospective projects were responsible for applying to EirGrid to obtain a GCA. • Defined range of MW capacity. • Development of offshore infrastructure to be developer led and adopted by EirGrid on completion.

The differences highlighted in the table above require changes in grid access requirements for project developers between Phase 1 and Phase 2. The following section sets out the changes the CRU proposes to grid access to account for the change in design between Phases 1 and 2. It should be noted that the CRU’s intention is to keep these grid requirements the same between the different auctions of Phase 2 (i.e., Phase 2.1 and Phase 2.2). However, the CRU notes that some of the details of Phase 2 are still evolving. The CRU will keep this under review and will update grid access policy and requirements as necessary in line with evolving national policy for offshore renewable energy and long-term grid planning.

2.2 Grid Access and EirGrid’s Role

EirGrid has a key role to play in successfully delivering the offshore wind targets. EirGrid’s role centres on delivering the required infrastructure and providing the necessary information to prospective bidders about this infrastructure in order to facilitate competitive auctions. Uncertainty around network infrastructure may result in prospective bidders applying higher risk premia to their bids, which may increase the cost risk to Irish consumers. The grid access policy, and EirGrid’s role in delivering grid access, should be designed to maximise the use of available grid capacity and minimise price impact risk to consumers. The CRU considers that EirGrid’s obligations can be summarised as follows:

- Proactively and collaboratively working with industry.

- Providing information to potential Phase 2 projects on feasible options for grid access.
- A clear process for the Phase 2 projects that meet the relevant criteria to obtain grid access.

The CRU has provided additional detail below as to how it considers EirGrid can practically meet these obligations.

2.2.1 Engagement with Industry

The CRU requires EirGrid to work closely with industry to provide sufficient information, in a timely manner, to allow auction participants to fully understand the grid access risks associated with the geographical area identified for each Phase 2 auction. The CRU assumes that EirGrid will determine the most efficient approach to engage with industry and is not prescribing a specific stakeholder engagement approach. The CRU will monitor EirGrid's industry engagement to determine if revisions for subsequent phases are required.

2.2.2 Data Provision & Timescales

The CRU expects EirGrid to provide data to bidders prior to the commencement of Phase 2 auctions. The data should be suitably detailed, robust, and timely to allow effective auction participation. Whilst the CRU does not believe it is appropriate to explicitly prescribe individual data items, the CRU would encourage EirGrid to use its discretion following industry engagement. The information should be readily available to any potential bidders, published on the EirGrid website where possible.

In terms of the process, the CRU expects that data provided prior to the auction will become more detailed/certain over time and ultimately would be akin (in respect of detail and topics covered) to what was supplied as part of the GCAs in Phase 1²¹. Given the different auction criteria in Phase 2 compared to Phase 1 (i.e., a single site with a defined location and defined capacity size), the CRU is of the view that a fully bespoke grid assessment for each applicant is not necessary. To replace this, EirGrid should publish an appropriate range of 'Grid Feasibility Scenario(s) (GFS) for all bidders in a defined time period (i.e., at least 30 calendar days prior to the start of the qualification process for a Phase 2 auction)²². These scenarios

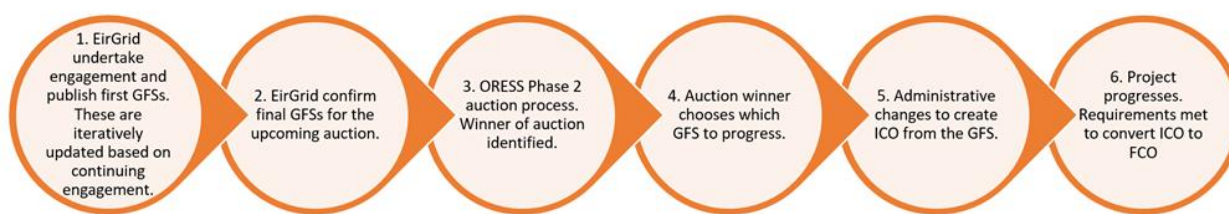
²¹ [CRU/2022/14](#) - Offshore Grid Connection Assessment – Phase 1 Projects – decision.

²² The CRU expects potential Phase 2 bidders to utilise all the information available before choosing the appropriate pathway. This includes network information (including the GFSs) provided by EirGrid, auction information provided by DECC, and seabed information provided by the Government of Ireland.

would be defined by EirGrid following stakeholder engagement and would include variables such as²³ differing connection points, asset boundaries and network capacities. The CRU acknowledges that proposed timing of the GFSs may need to be revised as a result of DECC's recent 'Offshore Renewable Electricity Support Scheme Phase Two Consultation'²⁴. This is to ensure there is sufficient time between the CRU's final decision on this paper and the start of ORESS 2.1 to allow EirGrid to develop and publish GFSs for ORESS 2.1. Following an auction, the winner will have a defined time (i.e., 30 calendar days) in which to choose which GFS to progress (from the range provided by EirGrid prior to the auction) and to inform EirGrid in writing of its choice; this choice is to be used by EirGrid as the basis of an Indicative Connection Offer (ICO).

The CRU expects the changes between the chosen GFS and ICO to be administrative only. A summary of this process is shown below in Figure 1.

Figure 1 - Summary of proposed Phase 2 process.



This approach will replace the need for each prospective bidder to apply individually to EirGrid for relevant connection information, with the auction winner being given the ability to choose between the required scenario(s) produced by EirGrid. In addition, the CRU expects that the timeframes and requirements related to obtaining the Full Connection Offer (FCO) to remain consistent with Phase 1 as per previous CRU decisions. The table below summarises an example of the different data and materials required to be provided in each stage of the process.

²³ But not limited to.

²⁴ [Department of Environment, Climate and Communications, Offshore Renewable Electricity Support Scheme Phase Two Consultation Document, July 2023.](#)

Table 5 – Comparison of suggested data and materials per each stage of the process.

Example Data	Grid Feasibility Scenario(s) (GFS)	Interim Connection Offer (ICO)	Full Connection Offer (FCO)
Assumptions	Indicative	Minor Revisions	Fully Revised
Charges & Security	Indicative	Revisions only to reflect any change of assumptions	Fully Revised
Connection Works	Indicative		Fully Revised
Dates & Periods	Indicative		Fully Revised
Terms & Conditions	Not provided	Broadly aligned to previous GCA terms and conditions	As per current FCO

It should be noted that table 5 is provided for **illustrative purposes only** and the CRU would expect EirGrid to engage with industry and confirm to the CRU in writing what data they will provide at each stage as soon as practicable.

2.2.3 Pre-requisites for a Full Grid Connection Offer

As per the DECC’s July 2023 ‘Offshore Renewable Electricity Support Scheme Phase Two Consultation’ paper, the Phase 2 auctions will provide the winning bidder with access to a prioritised consenting process, via the Marine Planning Policy Statement, which is expected to be finalised later this year.²⁵

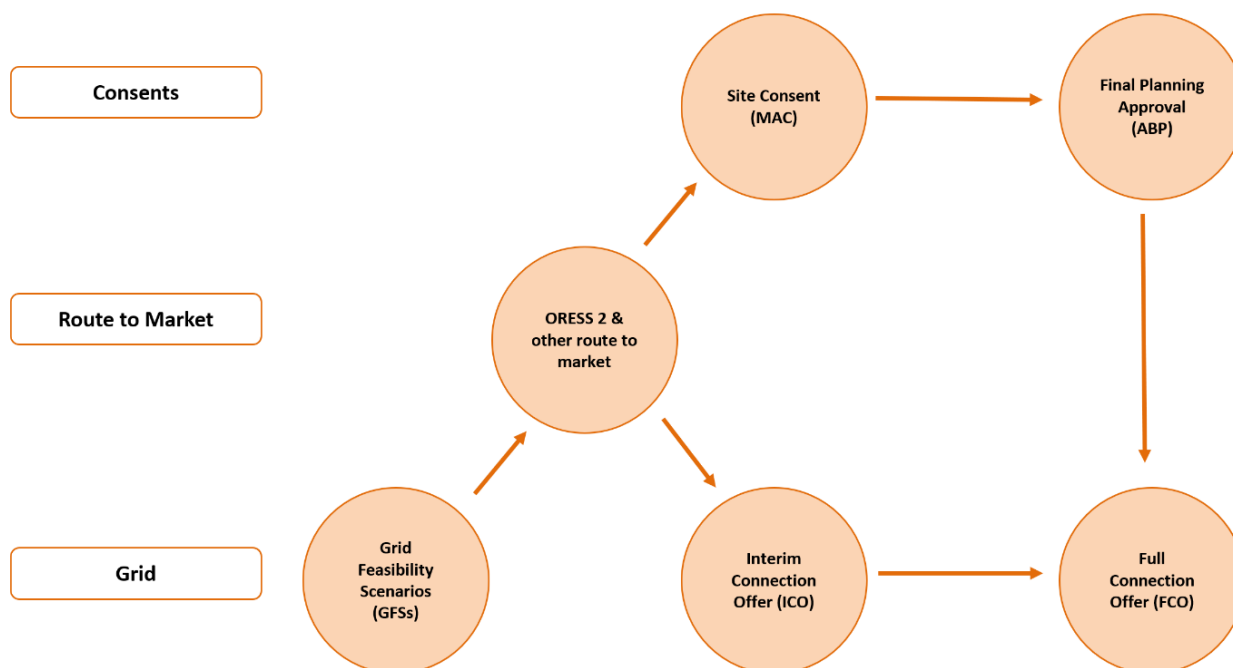
The CRU proposes to maintain the Phase 1 approach to grid access in respect of the prerequisites required to be eligible to request a Full Connection Offer (FCO) from EirGrid, i.e., the site consent process via the MAC and the final development planning consent approval from An Bord Pleanála (ABP) are both pre-requisites for the project to be eligible. The CRU would expect the project to apply to EirGrid for their FCO no later than 3 months following receipt of all consents, otherwise the ICO will be forfeit.

The figure below shows the main steps in the pathway grouped by category and linked to show how the grid connection process will operate alongside the consenting process and routes to market.

²⁵ Section 7 of [Government of Ireland, ORESS 2- Offshore Renewable Electricity Support Scheme Phase 2- Consultation document – July 2023](#).

The CRU consider that there may be a non ORESS route to grid for offshore wind projects in Phase 2. This is an area that will need further consideration and given the interactions between the MAC process and the grid allocation process further examination needs to be completed.

Figure 2 – Grid pathway for Phase 2.



2.2.4 Alignment with the Renewable Energy Directive (RED II)

The CRU’s proposed decision has also considered evolving European and national energy policy including the prioritisation and timelines in the Government’s Climate Action Plan and the timelines for the permit-granting process for the relevant administrative permits to build, repower and operate plants for the production of energy from renewable sources and assets necessary for their connection to the grid, as detailed in the Renewable Energy Directive²⁶ (RED II). Article 16 of the RED II includes the requirement that the permit granting process (including planning - and grid - related permits) for renewable energy projects “shall not exceed two years for power plants, including all relevant procedures of competent authorities.”

The CRU recognises that further changes may be required to meet the requirements of the evolving policy, and this will be given further consideration in the development of the next

²⁶ [2018/2001/EU](https://eur-lex.europa.eu/eli/dir/2018/2001/oj).

stages of connection policy.

Having considered the RED II against the CRU's proposed decision, the CRU is of the view that its proposed decision is consistent with the principles of the Directive as it allows planning and grid related permitting to operate in a mostly parallel manner. Whilst grid access is linked to planning in the later stages of the process (i.e., requiring ABP and MARA approvals before obtaining the FCO from EirGrid), the CRU is of the view that this is suitable despite it placing planning approvals and EirGrid processes on the critical path to achieving the timescales prescribed in the RED II. The CRU recently published a call for evidence paper on Electricity Generation and System Services Connection Policy²⁷ sought wider views on the development of new connection policy, including its alignment with the RED II.

Consultation questions:

- 1) Do you agree with CRU's proposed obligations on EirGrid for facilitating grid access under Phase 2? Are there other obligations on EirGrid which should be considered?
- 2) Do you believe 30 days before the qualification stage of Phase 2 is sufficient for auction participants to evaluate the Grid Feasibility Scenario(s)?
- 3) Should EirGrid provide a single or range of GFS scenarios? What are the benefits, risks, and implications of either approach?"
- 4) Do you agree with the pre-requisites for obtaining and maintaining an Indicative Connection Offer?
- 5) Do you agree with the pre-requisites for obtaining and maintaining a Full Connection Offer?
- 6) Do you agree that there should be a grid access pathway outside ORESS auctions for Phase 2? If so, what grid process should be implemented to facilitate this?

²⁷ [CRU/202341](#) - Electricity Generation and System Services Connection Policy – Call for Evidence.

3. Allocation of Network Capacity

Summary

The following section sets out the grid access requirements for Phase 1 projects that do not hold an ORESS 1 Notice of Award. Full details of the proposed decision are outlined in section 3 below.

Pathway to Grid Access – Phase 1 projects

Proceed as Phase 1 merchant project and comply with requirements below:

- Phase 1 GCA valid until end July 2024 only subject to meeting the conditions below:
 - Project submits planning application to An Bord Pleanála no later than backstop date in MAC (i.e., end June 2024); and
 - Project confirms a Route to Market to the satisfaction of the MAC Grantor (i.e., MARA) before the deadline (i.e., end July 2024).
- Following meeting the above requirements the Phase 1 Project are eligible to apply to EirGrid for a Full Connection Offer (FCO).

Note: Should the MAC become invalid at any stage during this period the GCA becomes invalid also.

Context

The CRU consider that target of at least 5 GW of installed offshore wind capacity will require more than one pathway to grid access. One pathway is via the ORESS auction process the other may be through a different route to market. This is where projects seek to connect to enter the markets without being in receipt of an ORESS auction subsidy which is paid for by the customer through the PSO. For the purposes of this proposed decision paper, the CRU refers to any offshore project seeking to connect without ORESS support as a 'merchant project', regardless of how the business case of that project is comprised (e.g., requiring a CPPA).

The CRU is aware of the developments of merchant offshore wind projects²⁸ in other

²⁸ [World's first offshore wind farm without subsidies to be built in the Netherlands | WindEurope](#)
[Way cleared for 960 MW offshore wind farm He Dreih of EnBW | EnBW.](#)

jurisdictions (summarised in Appendix 1). This proposed decision provides a starting point for the framework for merchant offshore wind grid access in Ireland.

3.1 Development of Merchant (non-ORESS) Offshore Projects

The CRU expects that the offshore wind market may in time become more mature and there will be less need for a customer-funded financial support scheme as purely commercial business cases become viable and sustainable. This in turn will reduce the burden on consumers.

The CRU consider that today there is no regulatory or legal barriers for merchant offshore projects to apply for the relevant consents from EirGrid, MARA or ABP for network connection, MAC and planning respectively. The CRU understands that it may be more challenging for these projects to obtain the required consents if the project is not located in an area identified in the DMAP or if it overlaps with the exclusive rights granted by the ORESS. Therefore, the CRU acknowledges these potential consenting challenges for deployment of merchant offshore wind and will continue to engage with DECC to find suitable solutions.

In respect of network capacity, the CRU considers that all projects should have an equal opportunity to connect to the grid.

3.2 Phase 1 Projects without an auction subsidy – Grid Pathway

The Phase 1 auction results²⁹ show that the auction received submissions from six projects, of which four were successful and two were not.

The Phase 1 projects that do not hold an ORESS 1 Notice of Award equate to over 1,100 MW of capacity that have received approval for their Maritime Area Consent (MAC) and are in receipt of a GCA and so they could, in theory, be developed without ORESS support - if a route to market³⁰ can be found and planning consent achieved. The CRU understands that these projects can only progress where a route to market can be developed (and agreed) by

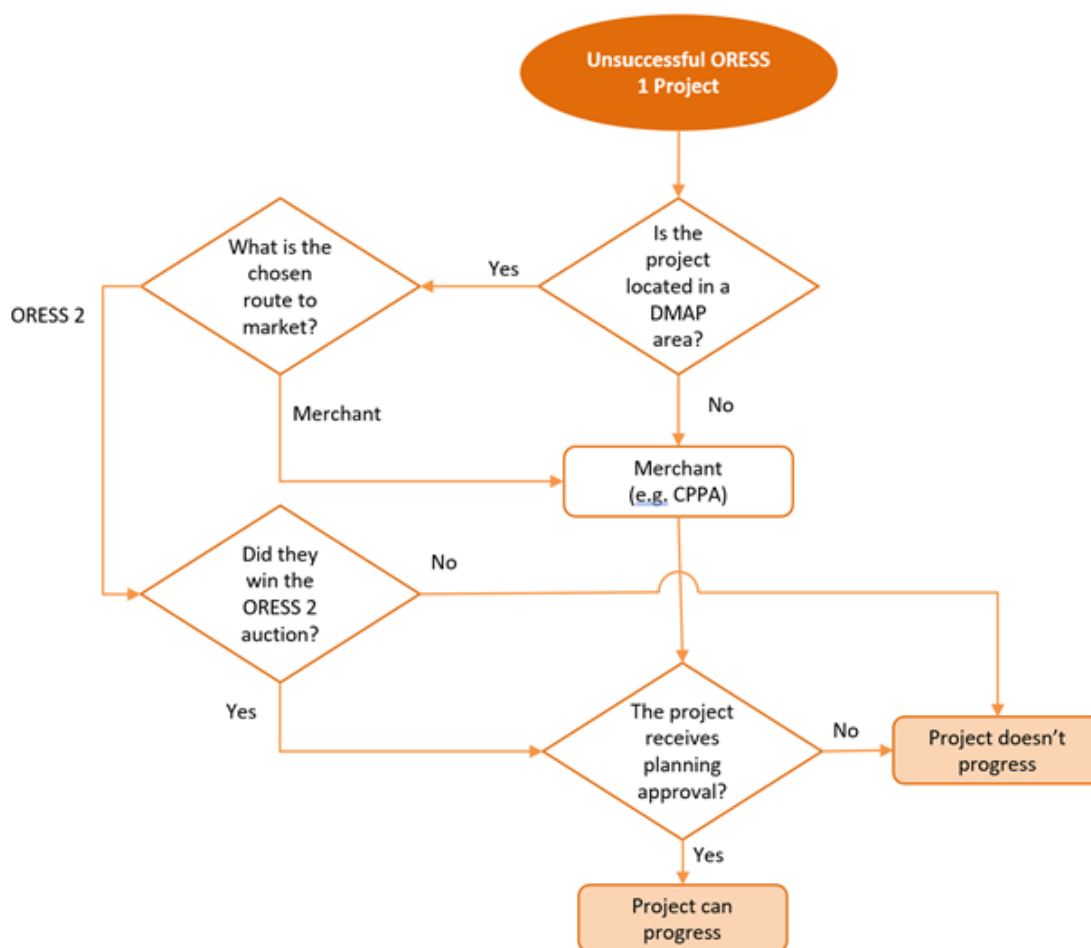
²⁹ [EirGrid, Renewable Electricity Support Scheme – ORESS 1 Final Auction Results, 14 June 2023.](#)

³⁰ The most likely route to market for these projects could be via a CPPA.

the deadline date documented in their respective MAC approvals.

The CRU consider it beneficial to provide an opportunity for these projects to connect to the grid as they are more progressed in terms of planning, surveying etc than many potential Phase 2 projects. As such, the CRU considers that providing a pathway for those projects to connect to the grid will be beneficial to meeting the targets and to consumers in terms of lower electricity costs. There is a trade off in allowing projects that may become merchant projects to continue in their current form for a number of years, as it could effectively hoard valuable grid that other projects may seek to use and it is not certain that the merchant projects will connect, as highlighted in Figure 3 below.

Figure 3 - Summary chart showing process for Phase 1 merchant projects.



The CRU notes that due to the Phase 1 projects that do not hold an ORESS 1 Notice of Award may be located in the same region as an east coast DMAP, there is a potential risk that these projects and a DMAP may overlap geographically. This in turn may present areas of friction for grid access between these projects and Phase 2 projects seeking to enter ORESS (e.g., seabed data, harbour access, route to shore and accessing scarce network capacity). To

mitigate this transitional risk, the CRU has considered what pathways to grid are available for these projects. In developing these pathways, the CRU assumes these projects will seek to be developed.

GCA Validity

The Phase 1 projects that do not hold an ORESS 1 Notice of Award currently have a GCA, however as per [CRU202214](#) as they do not have an ORESS Notice of Award they are not eligible to request a FCO from EirGrid.

There is some ambiguity however regarding how long the GCA remains valid. In [CRU202214](#) the decision stated that “*The CRU will revisit the decision of validity period beyond that described above after the DECC decision on Phase 2*”. The 3-month validity period outlined in that decision paper applies to Phase 1 projects that were successful in the ORESS 1 auction only.

Considering that, this proposed decision is focused on how long the GCA will remain valid (if at all) for these projects. The GCA as a construct was developed for the first ORESS auction to enable projects gain information on their connection method and cost. There was also a clear pathway to a FCO subject to the outcome of the ORESS 1 auction. This in turn should have offered certainty that developers could use to lower any unnecessary risk being bid into the auction.

It should be noted that the concept of a GCA does not apply to Phase 2 projects. Any project seeking to progress to connect to the grid under Phase 2 shall adhere to the grid process outlined in Section 2 above.

In assessing the GCA validity period for those projects the CRU has considered the pathways a project may take. The CRU currently understands there is one route for the Phase 1 project that do not hold an ORESS 1 Notice of Award to proceed to connect, (i.e., via the merchant route).

Since all Phase 1 projects were required to have MACs as a pre-requisite of entering the ORESS 1 auction, they all have valid MACs that contain a deadline to apply for planning permissions within 18 months of the MAC’s commencement date, otherwise the MAC will be terminated. This means planning applications need to be submitted by all Phase 1 projects by 28 June 2024. This planning submission deadline is currently expected to be before the approval of an east coast DMAP and start of the pre-qualification for Phase 2 east coast auction, as the DMAP publication date is not yet confirmed.

The CRU is of the view that extending the GCA validity period is the most appropriate option for these projects. However, the Phase 1 projects that do not hold an ORESS 1 Notice of Award need to demonstrate significant progress of connecting on a merchant basis in order to maintain a connection substantially similar³¹ to the GCA.

This would need to be demonstrated by submitting a planning permission application to ABP and securing an approved route to market from MARA by the **end July 2024** (i.e., one month after the deadline in the MAC). The CRU notes that failure to do so will result in the GCA becoming invalid.

The CRU understands that while this option results in short-term uncertainty (until July 2024), it provides a very clear demarcation between a Phase 2 east coast auction and the Phase 1 projects that do not hold an ORESS 1 Notice of Award, resulting in longer-term certainty for a Phase 2 east coast auction.

This is the only option that gives those projects an opportunity to connect on a basis they are familiar with (i.e., with their current GCA) whilst not holding network capacity that can be used by a Phase 2 east coast auction. Finally, it allows consistent and fair treatment between all Phase 2 participants regardless of whether or not they participated in Phase 1.

On balance, the CRU considers that in this proposed decision extending the GCA validity (for a time limited period) is in the long-term interests of Irish consumers as it provides the best balance between certainty for Phase 2 east coast auction bidders and allowing opportunities for the Phase 1 merchant projects to demonstrate a route to market. The CRU recognises the Government ambition and the offshore wind targets in Ireland, as such it aims to strike a balance between allocation of a scarce resource (transmission grid capacity) and the target of delivering at least 5 GW of offshore wind by 2030.

Whilst the CRU has considered all available information as part of this proposed decision, there remains some key items of which the CRU is, at the time of writing, unaware. These key items include the process and assessment criteria³² by which MARA will approve the route to market as part of the MAC³³ conditions as well as confirmation by DECC on the eligibility criteria and Terms & Conditions of the Phase 2 auctions. Should these items require a clarification or change to this the CRUs current thinking it will be reflected in the

³¹ EirGrid shall be allowed to update the GCA to reflect revised assumptions as a result of the dynamic nature of the network.

³² These key items include the information and assessment criteria which MARA will have regard to in order to be satisfied that a Route to Market has been obtained in accordance with the MAC conditions.

³³ it is necessary to hold a valid MAC and a condition of the Phase One MACs is the Holder must obtain a Route to Market on or before the 31st of December 2025.

Decision document later this year.

Consultation question:

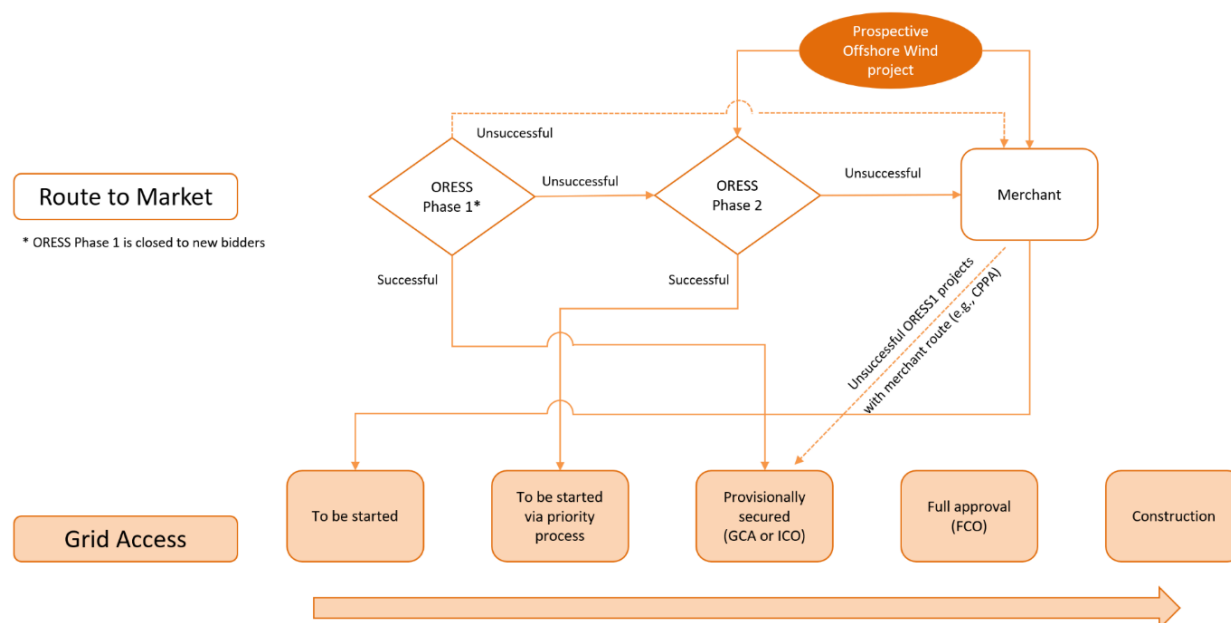
7) Do you agree with the proposed decision in relation to grid access for Phase 1 merchant projects? Are there other options not considered?

4. Conclusion and Next Steps

This CRU’s proposed decision is for the attention of all members of the public and the energy industry. It will be of particular interest to potential offshore renewable energy project developers.

There are several potential routes to market for Phase 2 offshore wind projects in Ireland, each of which result in the project entering the connections process at a slightly different stage, with the Phase 1 projects that do not hold an ORESS 1 Notice of Award entering the process at the most developed stage (provisionally secured via GCA), new merchant projects at the earliest stage, and Phase 2 winners in the middle, this is illustrated below in Figure 4.

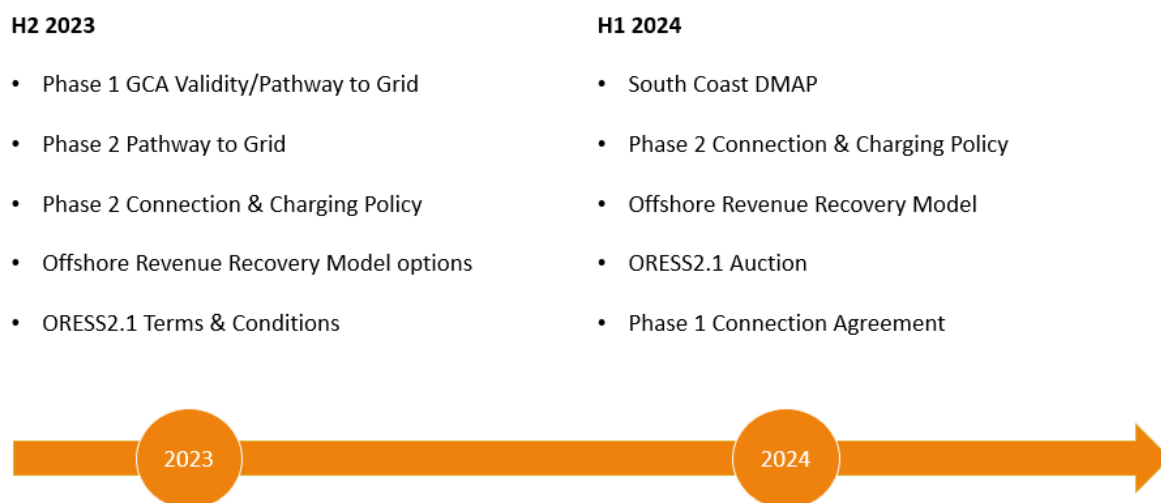
Figure 4 - Summary chart comparing routes to market against steps in obtaining grid access, i.e., Phase 2, Phase 1, i.e., merchant via a CPPA.



The CRU will continue to engage with DECC, EirGrid, MARA and other relevant stakeholders as it progresses its development of the offshore regulatory framework for Phase 2.

The figure below provides an illustrative overview of the currently anticipated interacting work items to be progressed by the relevant bodies over next year.

Figure 5 - High Level overview of Offshore work areas³⁴ for the next 12 months.



The CRU welcomes views from all interested parties on this proposed decision and the questions set out in it. The responses should be submitted via email by close of business on Friday, 22 September 2023 to offshoreeconomicpolicy@cru.ie.

Table 7 - Summary of consultation questions

Questions
1) Do you agree with CRU’s proposed obligations on EirGrid for facilitating grid access under Phase 2? Are there other obligations on EirGrid which should be considered?
2) Do you believe 30 days before the qualification stage of Phase 2 is sufficient for auction participants to evaluate the Grid Feasibility Scenario(s)?
3) Should EirGrid provide a single or range of GFS scenarios? What are the benefits, risks, and implications of either approach?
4) Do you agree with the pre-requisites for obtaining and maintaining an Indicative Connection Offer?
5) Do you agree with the pre-requisites for obtaining and maintaining a Full Connection Offer?
6) Do you agree that there should be a grid access pathway outside ORESS auctions for

³⁵ This list is the current known list of work areas and are subject to relevant consultation/Decisions from relevant bodies.

Phase 2? If so, what grid process should be implemented to facilitate this?

7) Do you agree the proposed decision in relation to grid access for Phase 1 merchant projects? Are there other options not considered?

Appendix 1 – International Case Studies

In developing this paper, the CRU has reviewed and considered other jurisdictions that installed and has operational offshore wind capacity.³⁵ The range of international examples provided a comparative analysis of how other jurisdictions enable offshore grid connections and the requirements. Table 8 provides a summary of these international case studies whilst the appendix provides further detail about each country.

Table 8: Summary of the 6 largest international offshore regimes.

Country	GW in Operation	GW Under Construction	2030 Offshore Wind Target	Tender includes		
				Grid	Permits	Subsidy
Belgium	2.263	<0.1	5.4 GW	Yes		
China	26.563	3.388	1,200 GW*	Province specific		
Denmark	2.343	<0.1	12.9 GW	Tendered – Yes Open door – No		
Germany	8.043	0.257	30 GW	Tender specific		
Great Britain	13.601	2.790	50 GW^	No	Subject to separate, independent tenders.	
Ireland (Phase 2)	0.025	<0.1	5 GW	No - priority process to obtain however		Yes
Netherlands	3.010	2.259	21 GW	Yes	Yes	Tender specific

* Note, the 1,200 GW target represents onshore wind, offshore wind and solar combined; the CRU was unable to find a central government target specifically for offshore wind.

^ Includes up to 5 GW of floating offshore wind.

The international case studies show a wide range of options for securing grid access, permits and subsidies are in use across the globe. Most of these countries use an approach that integrates at least 2 of these 3 factors into a combined process, with Great Britain being the exception. This shows that the approach proposed for Phase 2 is not dissimilar when compared to international peers such as Great Britain. This also demonstrates the potential to

³⁵ As per [Global Offshore Wind Report: World Forum Offshore Wind, Feb 2023](#).

more closely integrate these 3 factors into a single process – similar to what happens in other European markets – however this is outside of the scope of this paper.

The following is a summary of these sources³⁶ for each country:

- **Belgium**³⁷ – Belgium has already developed a significant proportion of its territorial waters with dedicated offshore wind zones, the newest of which was recently announced and subject to a competitive tendering exercise to connect up to an additional 3.5 GW of capacity. As part of the tender, the dedicated zone will be split in to 3 parcels of seabed, each of which has a defined maximum capacity. The winning bidder of each parcel receives all the necessary permits for the construction and operation of the offshore windfarm in that parcel. Preliminary studies are undertaken on each parcel (e.g., seabed surveys) with the results shared with potential bidders before the tender with network extension and reinforcement undertaken by Elia, the Belgian TSO.
- **China**³⁸ – China has the largest amount of offshore capacity currently operational or in the development pipeline. The targets for deployment and level of state support varies by province. This historically has been used to create and develop a domestic market for the entire supply chain needed to build an offshore wind project. This has resulted in a market which now has companies able to compete globally, including some domestic projects connecting subsidy free. The consenting and grid connections regimes also vary regionally but are highly planned and closely linked to regional development targets with strong political competition between provinces facilitating

³⁶ **Multi-country**

- COWI, October 2022, *Foreign Experiences for Awarding Offshore Wind*, accessed 31 July 2023, https://ens.dk/sites/ens.dk/files/Vindmoller_hav/part_1_-_foreign_experiences_for_awarding_offshore_wind.pdf.

³⁷ **Belgium**

- CMS Law, June 2017, *Offshore wind energy law and regulation in Belgium*, accessed 31 July 2023, <https://cms.law/en/int/expert-guides/cms-expert-guide-to-offshore-wind-in-northern-europe/belgium>.
- economie, June 2023, *Belgian offshore wind energy*, accessed 31 July 2023, <https://economie.fgov.be/en/themes/energy/belgian-offshore-wind-energy>.
- International Energy Agency, April 2022, *Belgium 2022 Energy Policy Review*, accessed 31 July 2023, <https://www.iea.org/reports/belgium-2022>.

³⁸ **China**

- Energy Iceberg, April 2022, *China's Offshore Wind 2025: Higher Ambition, Lower Price, But Challenges Remain*, accessed 31 July 2023, <https://energyiceberg.com/china-offshore-wind-2022/>.
- Ministry of Foreign Affairs, March 2022, *China offshore wind - Factsheet for Dutch companies*, accessed 31 July 2023, <https://www.rvo.nl/files/file/2022/03/Rapport-Offshore-wind-China.pdf>.
- offshoreWIND.biz, December 2022, *China's Largest Zero-Subsidy Offshore Wind Farm Now Up and Running*, accessed 31 July 2023, <https://www.offshorewind.biz/2022/12/29/chinas-largest-zero-subsidy-offshore-wind-farm-now-up-and-running/>.
- Rigzone, November 2022, *Chinese Offshore Wind Capacity Boom Driven By State Subsidies*, accessed 31 July 2023, <https://www.rigzone.com/news/chinese-offshore-wind-capacity-boom-driven-by-state-subsidies-23-nov-2022-171136-article/>.

rapid deployment of projects.

- **Denmark**³⁹ – Denmark was a pioneer in developing offshore wind and so has an established market. There are two broad methods to obtain the permits required, (i) as a result of tenders run the by the state for a specific subsidised capacity in a defined location or (ii) via a ‘open door’ procedure where an application for a licence is submitted with the applicant defining the capacity and location (it should be noted that this approach was paused in early 2023 due to potential issues with EU law). Grid connections for both approaches are provided by the Danish TSO Energinet.dk once the relevant technical information is provided however the connection point may be onshore or offshore depending on which approach is chosen.
- **Germany**⁴⁰ – In 2018 Germany set ambitious offshore wind targets, aiming to deploy least 30 GW of capacity by 2030, 40 GW by 2035, and 70 GW by 2045. To support delivery of these targets, multiple offshore wind sites have been identified for development with a defined maximum capacity to be installed at each site. All of the sites have a defined programme of when they will be tendered, and they will be tendered with varying states of certainty; some tenders will include permits and seabed data for that site whilst others will not (and so the winner will be responsible for obtaining). There is no financial or technical prequalification criteria for tenders however a security deposit must be provided, the value of which varies between sites. The national TSOs (who have a coast in their area - TenneT and 50Hertz) will be responsible creating the necessary grid infrastructure, including the offshore

³⁹ Denmark

- Bech.Bruun, June 2023, *Political agreement on tender framework for 9 GW offshore wind until 2030*, accessed 31 July 2023, <https://www.bechbruun.com/en/news/2023/political-agreement-on-tender-framework-for-9gw-offshore-winduntil-2030>.
- CMS Law, January 2017, *Offshore wind law and regulation in Denmark*, accessed July 2023, <https://cms.law/en/int/expert-guides/cms-expert-guide-to-offshore-wind-in-northern-europe/denmark>.
- Energywatch, February 2023, *Denmark to tender 9 GW offshore wind*, accessed 31 July 2023, <https://energywatch.com/EnergyNews/Renewables/article15103181.ece>.
- Wind Europe, February 2023, *Pause to Danish offshore wind scheme is absurd*, accessed 31 July 2023, <https://windeurope.org/newsroom/press-releases/pause-to-danish-offshore-wind-scheme-is-absurd/>.

⁴⁰ Germany

- BSH, July 2022, *Draft Site Development Plan – unofficial translation (English)*, date accessed 31 July 2023, https://www.bsh.de/EN/TOPICS/Offshore/Sectoral_planning/_Anlagen/Downloads/220805_int_Beteilig/Draft_Site_Development_Plan.pdf?__blob=publicationFile&v=1.
- BSH, January 2023, *Maritime sectoral planning*, date accessed 31 July 2023, https://www.bsh.de/EN/TOPICS/Offshore/Sectoral_planning/sectoral_planning_node.html.
- BSH, January 2023, *Flächenentwicklungsplan 2023 für die deutsche Nordsee und Ostsee (Area development plan 2023 for the German North Sea and Baltic Sea)*, date accessed 31 July 2023, https://www.bsh.de/DE/THEMEN/Offshore/Meeresfachplanung/Flaechenentwicklungsplan/_Anlagen/Downloads/FEP_2023_1/Flaechenentwicklungsplan_2023.pdf?__blob=publicationFile&v=1.
- OWC, September 2022, *From 7 to 70 GW: Germany's Offshore Wind Market*, date accessed 31 July 2023, <https://owcltd.com/from-7-to-70-gw-germanys-offshore-wind-market/>.

connection point.

- **Great Britain**⁴¹ – Due to Great Britain’s geographic and electricity market structure similarities with Ireland as well as the highly developed offshore industry in Great Britain, the CRU have closely examined recent changes to the offshore regime in Great Britain. The TSO of Great Britain has undertaken significant work in recent years to transition their connection process from a market driven process for offshore projects to a more planned process with their Holistic Network Design (HND). In addition, the two government financial support regimes (called Contracts for Difference [CfD] & Capacity Market [CM]) are well established and require entrants to have secured a grid connection and to have developed a detailed supply chain plan to participate. Finally, there are separate auctions to secure seabed leases for prospective offshore projects. The three processes of grid, financial support and seabed consent are largely separate with the developer responsible for coordinating between them (e.g., ensuring delivery timescales align).
- **Netherlands**⁴² – Tender schemes for offshore wind have been in use in the Netherlands since 2015, mostly driven by government targets set in 2013 to reach ~4.7 GW of offshore capacity (based on 16% of all energy to be generated from renewable sources) by 2023 – both subsidised and unsubsidised tenders have been used. This was strictly controlled with the government setting requirements via the issuing of “wind permits”. Requirements for obtaining a wind permit were similar between subsidised and unsubsidised tenders with unsubsidised tenderers needing to provide greater proof of financial feasibility. Specific locations for offshore development are defined in legislation with the offshore the grid being provided by the Dutch TSO (TenneT) via offshore substations with firm capacity up to a defined capacity value.

⁴¹ **Great Britain**

- The Crown Estate, April 2023, *Offshore Wind Report 2022*, date accessed 31 July 2023, https://www.thecrownestate.co.uk/media/4382/11720_owoperationalreport_2022_tp_020523plusaccessibility.pdf.
- Department for Business, Energy & Industrial Strategy and Department for Energy Security & Net Zero, April 2022, *British Energy Security Strategy*, date accessed 31 July 2023, <https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy#renewables>.
- Low Carbon Contracts Company, 2023, *Our Schemes*, date accessed 31 July 2023, <https://www.lowcarboncontracts.uk/index.php/our-schemes>.
- nationalgridESO Electricity Market Reform Delivery Body, July 2023, *EMR Portal*, date accessed 31 July 2023, <https://www.emrdeliverybody.com/sitepages/home.aspx>.
- nationalgridESO, July 2022, *Pathway to 2030. A holistic network design to support offshore wind deployment for net zero*, date accessed 31 July 2023, <https://www.nationalgrideso.com/document/262676/download>.

⁴² **Netherlands**

- CMS Law, June 2018, *Offshore wind law and regulation in the Netherlands*, date accessed 31 July 2023, <https://cms.law/en/int/expert-guides/cms-expert-guide-to-offshore-wind-in-northern-europe/netherlands>.
- Netherlands Enterprise Agency, April 2023, *Dutch Offshore Wind Market Report 2023*, date accessed 31 July 2023, <https://english.rvo.nl/sites/default/files/2023/05/Offshore-Wind-Market-Report.pdf>.

CRU Disclosure Requirements

Unless marked confidential, all responses from companies or organisations may be fully published on the CRU's website. Respondents may request that their response is kept confidential.

The CRU shall respect this request, subject to any obligations to disclose information. Respondents who wish to have their responses remain confidential should clearly mark the document to that effect and include the reasons for confidentiality.

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