An Coimisiún um Rialáil Fóntais
Commission for Regulation of Utilities

Greenlink Electricity Interconnector - Cap and Floor Regulatory Treatment

Decision Paper

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CRU Mission Statement

The CRU's mission is to protect the public interest in Water, Energy and Energy Safety.

The CRU is guided by four strategic priorities that sit alongside the core activities we undertake to deliver on the public interest. These are:

- Deliver sustainable low-carbon solutions with well-regulated markets and networks;
- Ensure compliance and accountability through best regulatory practice;
- Develop effective communications to support customers and the regulatory process;
- Foster and maintain a high-performance culture and organisation to achieve our vision.

Executive Summary

This decision paper follows the CRU consultation paper on the Greenlink Interconnector Cap and Floor request (CRU20042). It provides a summary of the responses received to that consultation and sets out the CRU's decision on the regulatory treatment for the Greenlink electricity interconnector in Ireland.

In October 2018, following a public consultation on the Greenlink electricity interconnector application,[1] the CRU published a determination paper[2] which stated that the construction and operation of the Greenlink interconnector was in the public interest. However, that determination did not provide a view on a further element of the application from Greenlink which sought to allow for a Cap and Floor revenue regime[3] to apply to the interconnector. The CRU committed to assess the appropriateness of the Cap and Floor revenue regime at a later stage, when sufficiently detailed financial and technical information from the Greenlink developers was submitted to the CRU[4].

On 30 August 2019, CRU received a detailed submission from Greenlink regarding the Cap and Floor revenue regime. As part of that submission, Greenlink requested the CRU to consider:

1. **Accepting a Cap and Floor revenue regime for the project**[5]; and
2. Incorporating closely aligned features[6] to the proposed Cap and Floor regime that Greenlink has been granted (in principle) from Ofgem in Great Britain (GB).

Between 26 March 2020 and 21 May 2020, the CRU held a public consultation (CRU20042) on the Cap and Floor regime features requested by Greenlink and the appropriateness of a Cap and Floor regulatory treatment[7] for the Greenlink interconnector. In that paper CRU outlined its "minded to" position on the Cap and Floor regulatory treatment and its initial views of the regime features requested by Greenlink.

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[1] CRU18216
[2] CRU18119
[3] Any revenue shortfall relative to the floor would be recovered from consumers through transmission network charges, and any revenues earned above the cap would be returned to consumers through lower transmission charges.
[4] CRU18119, p.37
[5] Greenlink has requested a closely aligned Cap and Floor regulatory regime in respect of 50% of Greenlink's regulatory asset value, operating costs and revenues, consistent with the approach it has agreed in principle with Ofgem, namely, that the project's costs and revenues would be underwritten by GB consumers and Irish consumers in 50%/50% split under a 25-year Cap and Floor regime.
[6] Irish country specific features e.g. tax, inflation, law.
[7] This is the first time the CRU has been asked to assess a request for a Cap and Floor regulatory regime. The CRU does not have a default approach to granting a Cap and Floor regime to interconnectors, and must therefore consider each aspect of an application on its merits

The CRU has reviewed the consultation responses and considered the points raised by all respondents. The CRU notes that most of the respondents agreed and supported the CRU's minded to position that a Cap and Floor regime is the most appropriate regulatory treatment for Greenlink in Ireland. CRU notes that the aim of the Cap and Floor regulatory treatment is to support efficient investment in electricity interconnectors by underpinning financeability, while retaining performance incentives and limiting consumer risk exposure.

The CRU considers that the Cap and Floor regulatory treatment offers:

- A suitable balance between providing incentives for interconnector operators to minimise cost and optimise performance providing protection for consumers from excess cost and excess returns; and
- A protection for debt-holders to ensure project financeability[8].

Having carefully considered respondents' feedback on the Greenlink developer's request and noting the benefits of the regime, **the CRU determines that a Cap and Floor regulatory regime is the most appropriate regulatory treatment for the Greenlink interconnector.** The CRU considers that this regime will provide an appropriate level of support to this project. This support should help facilitate the successful delivery of this project without compromising the interests of the Irish consumer.

CRU would like to note that the next paper the CRU will publish regarding the Greenlink Interconnector will be a paper outlining the CRU's minded to position on the regulatory financial design of the Cap and Floor mechanism that would apply to Greenlink in Ireland. Moreover, this paper will include the initial Cap and Floor levels, which would apply to 50% of the costs of the project. This paper is expected to be published for consultation in Q1 2021.

This paper will outline who bears the risks (Developer and Consumers) and at what level. This paper will take into account:

- updates to Greenlink's requested regime features[9];

[8]

[9] CRU notes that Greenlink's position has continued to evolve since its Cap and Floor submission in August 2019.

- Ofgem's decisions on the regime variations[10], following its consultation on proposed changes to the default Cap and Floor regulatory framework for electricity interconnectors;
- further evidence relevant to the assessment of Greenlink's submission, i.e. taxation; etc;
- final project costs submission from the Greenlink developers;
- responses received to CRU20042.

Additionally, the CRU notes that it will continue to engage with Greenlink to address issues identified in the CRU's initial review of Greenlink's August 2019 submission. The CRU will also continue to engage with the Ofgem to explore the potential for a regulatory decision-making process that takes both the Irish and GB regulatory separate decision-making processes into account. The CRU notes that a final decision on the Greenlink Cap and Floor is programmed for 2021.

[10] Decision on proposed changes to Ofgem's electricity interconnector Cap and Floor regime to enable project finance solutions published in May 2020: https://www.ofgem.gov.uk/system/files/docs/2020/05/regime_variations_decision.pdf

Public/Customer Impact Statement

Electricity interconnectors are high-voltage cables that connect the electricity systems of neighbouring countries. They enable excess power, such as that generated from wind and solar farms, to be traded and shared between countries.

Electricity interconnectors allow neighbouring countries to move surplus renewable electricity from where it is produced to where it is needed most. For example, with the planned interconnector between the UK and Ireland, Greenlink, when weather conditions mean that supplies from Ireland wind farms are lower, Ireland will be able to import excess renewable energy from the UK. Meanwhile, on windy days in Ireland, its excess wind and solar farms energy can be exported via the interconnector to the UK. This ensures renewable energy is not wasted and makes for a lower carbon, more efficient power system.

Additionally, new interconnectors in Ireland will be necessary for meeting the European Commission's 2030 interconnection targets (15% electricity interconnection target by 2030[11]) as Ireland transitions to a low carbon economy.[12] Connecting to different markets could be particularly beneficial for Ireland, as it could reduce electricity prices and improve security of supply.

Greenlink has requested from the CRU a Cap and Floor regime in respect of 50% of its project costs. CRU would set a minimum ("floor") level of revenue that the interconnector would be allowed to earn. This level would typically enable the interconnector to finance its debt obligations. Any revenues earned above the floor level would be allowed to retain up to a level of maximum allowed revenue ("cap") set by the CRU. Any revenue shortfall relative to the floor would be recovered from consumers through transmission network charges, and any revenues earned above the cap would be returned to consumers through lower transmission charges.

[11] defined as import capacity over installed generation capacity.
[12] https://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest/electricity-interconnection-targets

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Glossary of Terms and Abbreviations

Abbreviation or Term	Definition or Meaning
CRU	Commission for Regulation of Utilities
CER	Commission for Energy Regulation
GB	Great Britain
the Act	Electricity Regulation Act 1999
PCI	Project of Common Interest
CBA	Cost Benefit Analysis
TUoS	Transmission Use of System Charge
EU	European Union
IPA	Initial Project Assessment
FPA	Final Project Assessment
RAV	Regulated Asset Value
RESS	Renewable Electricity Support Scheme
TSO	Transmission System Operator
TUoS	Transmission Use of System Charge

1. Introduction

1.1. Commission for Regulation of Utilities

The Commission for Regulation of Utilities (CRU) is Ireland's independent energy and water regulator. The CRU was originally established as the Commission for Energy Regulation (CER) in 1999. The CRU's mission is to protect the public interest in Water, Energy and Energy Safety. The work of the CRU impacts every Irish home and business. The sectors the CRU regulates underpin Irish economic competitiveness, investment and growth, while also contribute to our international obligations to address climate change.

The CRU is committed to playing its role to help deliver a secure, low carbon future at the least possible cost, while ensuring energy is supplied safely, empowered and protected customers pay reasonable prices and the CRU delivers a sustainable, reliable and efficient future for energy and water.

The CRU is guided by four strategic priorities that sit alongside the core activities the CRU undertakes to deliver on the public interest. These are:

- Deliver sustainable low-carbon solutions with well-regulated markets and networks;
- Ensure compliance and accountability through best regulatory practice;
- Develop effective communications to support customers and the regulatory process;
- Foster and maintain a high-performance culture and organisation to achieve our vision.

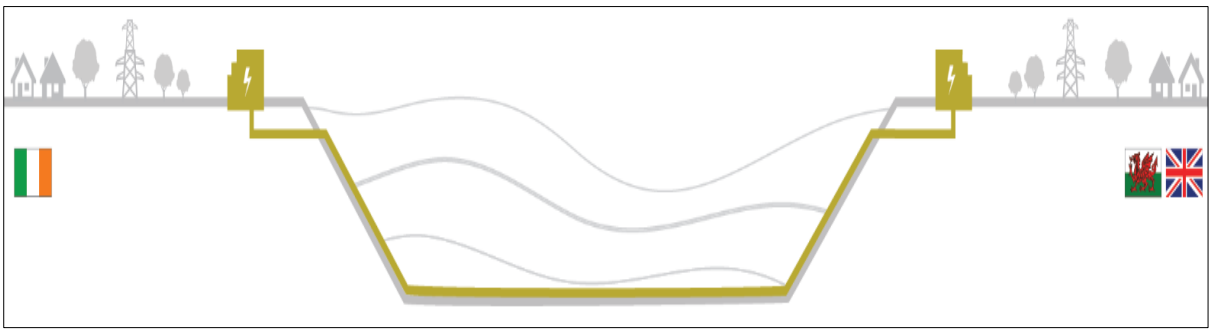
Further information on the CRU's role and relevant legislation can be found on the CRU's website at www.cru.ie.

1.2. Background

The Greenlink interconnector (Greenlink) is a proposed 504 MW subsea electrical cable linking the electricity transmission systems of Ireland and Great Britain (GB). It is anticipated that the link will provide a new grid connection between the Great Island transmission substation in Wexford and Pembroke transmission substation in South Wales (see figure 1.2 below).

Greenlink is being developed by Greenlink Interconnector Limited[13]. Greenlink has been designated as a Project of Common Interest (PCI) by the European Commission and has been granted in principle, by Ofgem, a Cap and Floor regulatory regime[14].

Figure 1.2: Graphical illustration of Greenlink



In December 2017, Greenlink's project promoters submitted an interconnector application under Section 2A of the Electricity Regulation Act 1999, as amended (the Act). In its application, they requested the CRU to:

1. Determine if the construction of the Greenlink interconnector is in the public interest, and whether the project may be considered to be part of the transmission system for the purposes of calculating and imposing charges for the use of the transmission system; and
2. Approve the proposed charging methodology for Greenlink pursuant to Section 35 of the Electricity Regulation Act 1999, as amended.

The CRU decided to assess the Greenlink interconnector application in two stages:

- the first stage is testing the public interest case of the proposed interconnector; and
- the second stage is to decide which regulatory approach is justified based on the public interest test.

The first stage of the Greenlink application assessment commenced in June 2018, when the CRU consulted on the public interest test. In assessing the public interest test the CRU conducted its own cost benefit analysis (CBA) of the Greenlink submission. In October 2018, following consultation, the CRU determined that the construction of the Greenlink interconnector was in the public interest. However, the CRU noted that if any subsequent

[13] Greenlink Interconnector Limited is owned jointly by Element Power Holdings, part of Hudson Sustainable Investments, and Partners Group on behalf of its clients. Further information on Greenlink is available on www.greenlink.ie.
[14] Regulatory framework that sets the maximum (cap) and the minimum (floor) on the level of revenues that can be gained by interconnector project promoters.

information was given to the CRU that would lead the CRU to consider that the basis for the public interest test decision had materially changed then the CRU could revisit its determination.[15]

The second stage of the Greenlink application assessment commenced on 30 August 2019, when Greenlink's project promoters submitted to the CRU a detailed request for Cap and Floor regulation of the Greenlink interconnector. As part of this submission, Greenlink has requested the CRU to consider:

1. Accepting a Cap and Floor revenue regime for the project[16]; and
2. Incorporating closely aligned features[17] to the proposed Cap and Floor regime that Greenlink has been granted (in principle) from Ofgem in GB.

In March 2020, the CRU consulted on the features of the Cap and Floor regime Greenlink has requested and the CRU's minded to position that a Cap and Floor regime is the appropriate regulatory revenue model for Greenlink in Ireland. As the CRU noted in the Greenlink consultation paper (CRU20042), the CRU has considered the individual circumstances of this application[18] and has taken into account the following considerations[19]:

- Facilitating different financing solutions, including from private developers, as a way of attracting efficient and innovative proposals;
- Providing consistent incentives for the developers across both jurisdictions (Ireland and GB) that the interconnector links to; and
- Appropriate allocation of risk between consumers, developers and other affected parties (e.g. domestic generators).

1.3. Purpose of Paper

The purpose of this paper is to outline the CRU's decision following a consultation on the CRU's minded to position to grant a Cap and Floor regulatory regime to Greenlink.

[15] In this case, the CRU may re-run its analysis in order to confirm whether or not the project continues to be in the public interest.
[16] Greenlink has requested a closely aligned Cap and Floor regulatory regime in respect of 50% of Greenlink's regulatory asset value, operating costs and revenues, consistent with the approach it has agreed in principle with Ofgem, namely, that the project's costs and revenues would be underwritten by GB consumers and Irish consumers in 50%/50% split under a 25-year Cap and Floor regime.
[17] Irish country specific features e.g. tax, inflation, law.
[18] Adopting a Cap and Floor regime would be consistent with the Greenlink's Cap and Floor regulatory treatment request.
[19] CRU20042, page 25

1.4. Legal and Policy Context

The CRU has a statutory role in assessing electricity interconnection projects and deciding on their regulatory treatment. An overview of those responsibilities under Irish and European law is provided in the CRU information paper (CRU18056). A summary of CRU's responsibilities under Irish legislation is outlined below:

Under the 1999 Electricity Regulation Act (as amended) (Act) interconnector developers may apply directly to the CRU for a determination on their application. The section below outlines briefly those sections of the Act.

For the purposes of this consultation the CRU is examining section 2A "Public Interest".

Section 2A of the Act states that an interconnector owned by a person other than the board (i.e. ESB) may, where the CRU determines that it is in the public interest, be considered to be part of the transmission system for the purposes of calculating and imposing charges for the use of the transmission system (as set out in Section 35 - Charges for connection to and use of transmission or distribution system).

The other sections below provide context for some of the relevant approvals/consents Greenlink would need in order to become fully operational. However, these are not examined at this point.

Under Section 16 of the Act, the CRU may grant or may refuse to grant to any person an authorisation to construct an interconnector, and where the CRU grants such an authorisation, that authorisation shall be subject to such terms and conditions as may be specified in the authorisation.

Section 16A of the Act provides that, with the consent of the Minister, the CRU may secure the construction of an interconnector by:

- a competitive tender;
- an authorisation granted to a person without a prior competitive tender where that person demonstrates, to the satisfaction of the CRU, that the granting of an authorisation, subject to such conditions as the CRU deems necessary and appropriate, is in the long-term interests of final customers; or
- requesting the transmission system operator to provide for the construction of an interconnector in its development plan.

In addition to the above and in accordance with Section 14 of the Act, the CRU may grant or refuse to grant a licence to transport electricity and maintain an interconnector.

Finally, pursuant to Section 9 of the Act, the CRU has responsibilities which include:

- protect the interests of final customers;
- promote competition, efficiency and the use of renewable and sustainable energy;
- not discriminate unfairly between relevant stakeholders;
- contribute to the development of the internal market and to the development of compatible regulatory frameworks between regions of the European Union, by engaging, co-operating and consulting with other national regulatory authorities, the Agency and with the European Commission in regard to cross-border issues;
- cooperate with other regulatory authorities at a regional level to foster operational arrangements to enable an adequate level of interconnection capacity within the region and between regions to allow the development of effective competition and improvement of security of supply; and
- co-operate with other regulatory authorities at a regional level to develop rules on access to cross border infrastructure including allocation of capacity and congestion management.

1.5. Related Documents

1. CRU18119: Consultation on the Greenlink application and the public interest test;
    - CRU18119a: Greenlink Electricity Interconnector Application;
2. CRU18216: Determination that the construction of the Greenlink interconnector is in the public interest;
3. CRU20042: Consultation on the CRU's minded to position on the Cap and Floor regulatory regime and its initial views of the regime features requested by Greenlink;
    - CRU20042a: Non-Confidential Greenlink's Cap and Floor Request.

1.6. Structure of Paper

This paper is structured as follows:

- **Section 1**, provides an introduction to the CRU and provides background information to this paper.
- **Section 2**, provides an overview of the regulatory treatment requested.
- **Section 3**, outlines the CRU's decision on the Cap and Floor Regulatory Framework for the Greenlink Interconnector.

- **Section 4**, provides a summary of the responses received to the Cap and Floor consultation and the CRU's position.
- **Section 5**, provides the next steps with regards to the Greenlink Interconnector application.

2. Regulatory Treatment Request

2.1. Greenlink's Regulatory Treatment Request

In December 2017, Greenlink requested the CRU to grant a closely aligned Cap and Floor regulatory regime regarding 50% of Greenlink's regulatory asset value, operating costs and revenues. Project's costs and revenues would be underwritten by GB and Irish consumers in 50/50 split under a 25-year Cap and Floor regime.[20]

Under the requested regime on the Irish side, if the project's revenues are between the cap and the floor, Greenlink would simply retain this revenue. However, Greenlink's revenue would also be constrained by the level of the cap and protected by the level of the floor, triggering payments to or from Irish consumers through Transmission Use of System (TUoS) charges:

- If Greenlink's revenue exceeds the cap, Greenlink would return some of its revenues to Irish consumers, and
- If Greenlink's revenues are below the floor, Greenlink would receive a "top-up" payment from Irish consumers.

The requested regulatory regime would start from when the Greenlink interconnector commences operation, or, in the case of a delay, 12 months from when it was scheduled to commence operation. The regime would endure for a period of 25 years. After the initial 25-year regulatory period, Greenlink expects to operate under a merchant model[21].

2.2. Cap and Floor Regime

Interconnectors primarily obtain their revenues from sales of interconnection capacity to users who wish to move electricity between markets with different prices (congestion revenues). There are various approaches to regulating interconnectors and determining who bears the risk of the interconnector being able to earn congestion revenues. Three regulatory approaches were outlined in the CRU consultation paper (CRU20042 published in March 2020). A summary of those approaches is outlined below:

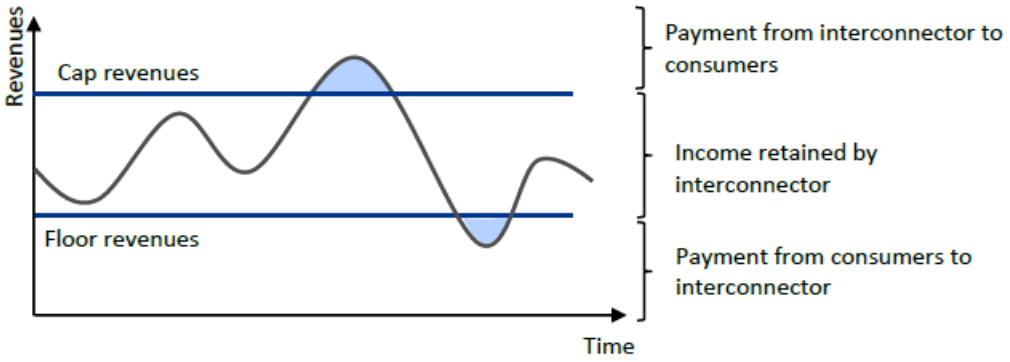
[20] Greenlink submission
[21] A summary of a merchant model is set out below.

1. **Merchant model** – in a merchant model, which is exceptional in Europe, the interconnector is fully reliant on its congestion revenues[22]. Under a fully merchant model, 100% of the risk sits with the interconnector's operator, as consumers provide no underwriting for the project and exposing the interconnector to full downside risk;
2. **Cap and Floor model** – interconnectors can also be partly regulated, and therefore partly funded by the tariffs. For instance, in a so-called Cap and Floor model, an interconnector's sales revenues that are below the floor are topped up by network tariffs and its sales revenues above the cap are returned to the end consumer. It underwrites debt costs through the revenue floor, but at a level that is some way below the fully regulated model. This reduces the downside risk to Irish consumers compared to the fully regulated model; and
3. **Fully regulated model** – in a fully regulated model, which is most common in Europe, investment costs are recovered through network tariffs. In this model, it is the end consumer that pays the investment costs in full and receives all the revenues from sales of interconnection capacity. Under a fully regulated model, the majority of revenue risk transfers to consumers, as the interconnector revenues are guaranteed regardless of interconnector capacity revenue, subject to the interconnector meeting minimum operating requirements.

The Cap and Floor model sits in the middle between the established 'merchant model' in which the operator bears the full financial risk associated with the project and a fully regulated revenue model in which the electricity consumer bears the financial risk for the project. The Cap and Floor regulatory regime is an alternative, whereby a maximum (the 'cap') and minimum level (the 'floor') of revenue is set which the interconnector operator can accrue in any year. Any excess revenue above the cap would be passed back to the consumer through the network charges and conversely where revenues are below the floor the interconnector owner would be topped up through network charges paid for by the consumer. An illustration of this is shown in the figure below.

[22] There may be other sources of revenues available to interconnectors, e.g. revenues from contracts awarded through capacity auctions.

Figure 2.1: Cap and Floor regime



The aim of the Cap and Floor model is to support efficient investment in electricity interconnectors by underpinning financeability, while retaining performance incentives and limiting consumer risk exposure.

Developers will sell the capacity of their interconnector in line with the requirements of the Third Energy Package, and the relevant European Network Codes. Developers may also access additional revenue streams, such as participating in the capacity market and providing ancillary services. The gap between the Cap and Floor is designed so that developers are exposed to the benefits provided by the interconnector and so are incentivised to identify and develop projects in a way that maximises these benefits, whilst ensuring that costs are incurred efficiently.

The cap on revenues provides an investment route that ensures projects are compliant with 'use of revenues' requirements set out in EU legislation, and allows developers to receive returns, but not at a level that is excessive. Granting the project a revenue floor underwritten by consumers reflects that it is in consumers' interests for more interconnector capacity to be built. Granting a revenue floor is therefore contingent on the assessment of the benefits a project provides for consumers. The regime is a cost-based regime; both the cap and the floor are determined by applying financial parameters to the efficient costs of developing and operating the project.

The Cap and Floor levels are built from building blocks of capital costs, operational and maintenance costs, decommissioning costs, tax and allowed return. The Cap and Floor are then set at constant levels in real terms over the life of the regime. Actual revenues earned are assessed against the Cap and Floor levels on a periodic basis.

3. CRU Decision

Greenlink has, to date, demonstrated[23] to the CRU that it is in Irish consumers' interests for the project to go ahead and has also, at a high-level, demonstrated that a Cap and Floor regime is the appropriate revenue model for this project.

CRU notes that the aim of the Cap and Floor regulatory treatment is to support efficient investment in electricity interconnectors by underpinning financeability, while retaining performance incentives and limiting consumer risk exposure.

The CRU considers that the Cap and Floor regulatory treatment offers:

- A suitable balance between providing incentives for interconnector operators to minimise cost and optimise performance providing protection for consumers from excess cost and excess returns; and
- A protection for debt-holders to ensure project financeability.

Having carefully considered respondents' feedback on the Greenlink developer's request and noting the benefits of the regime, **the CRU determines that a Cap and Floor regulatory regime for the Greenlink interconnector is the most appropriate regulatory treatment.** The CRU considers that this regime will provide an appropriate level of support to this project. This support should help facilitate the successful delivery of this project without compromising the interests of the Irish consumer.

[23] CRU carried out a detailed cost benefit analysis (CBA) of the Greenlink application that accounted for a number of sensitivities and scenarios. The CBA indicated that, at the time of assessing the Greenlink application, Greenlink has the potential to provide a net benefit to Irish consumers and Ireland as a whole.

4. Summary of Responses Received

On 26 March 2020, the CRU published a consultation on the features of the Cap and Floor regime Greenlink has requested and the CRU's minded to position that a Cap and Floor regime is the appropriate regulatory revenue framework for Greenlink in Ireland. The CRU requested comments on the questions raised in the consultation paper. These were:

Question 1

Do you agree with the CRU's minded to position that a Cap and Floor regime is the appropriate regulatory revenue model for Greenlink in Ireland?

Question 2

Do you agree with Greenlink's requested regime features?

Question 3

Are there other features the CRU should consider?

Question 4

What are your views on the CRU's initial assessment of the requested features?

Question 5

Should the CRU consider any other specific factors or elements in its initial assessment of the requested features?

The CRU received 10 responses to the consultation paper, one was confidential. The main points made by respondents are summarised below. The non-confidential submissions are published on the CRU's website alongside this decision paper.

4.1. Do you agree with the CRU's minded to position that a Cap and Floor regime is the appropriate regulatory revenue model for Greenlink in Ireland?

This is the first time that the CRU has been asked to grant a Cap and Floor regulatory regime for an interconnector. Unlike Ofgem the CRU does not have a default approach to granting a Cap and Floor regime to interconnectors, therefore, the CRU must consider each aspect of an application on its merits.

Comments received agreed and supported the CRU's minded to position that a Cap and Floor regime is the appropriate regulatory revenue model for Greenlink in Ireland. Some of the respondents highlighted that a Cap and Floor regime is not just an appropriate regulatory model, it is likely to be the only practical regime that can be used.

One respondent believes that the Cap and Floor regime "*provides the best balance between providing incentives to the interconnector developers and owners to optimise performance and reduce costs whilst protecting consumers from both excess costs and excess returns".*

CRU Response

The CRU noted the views submitted regarding the CRU's minded to position that a Cap and Floor regime is the appropriate regulatory revenue model for Greenlink in Ireland. Most of the respondents agreed with the CRU's minded to position.

Furthermore, the CRU has considered the individual circumstances of the Greenlink Cap and Floor request and has taken into account the following:

- Facilitating different financing solutions, including from private developers, as a way of attracting efficient and innovative proposals;
- Providing consistent incentives for the developers across both jurisdictions (Ireland and GB) that the interconnector links to; and
- Appropriate allocation of risk between consumers, developers and other affected parties (e.g. domestic generators).

The CRU agrees that a Cap and Floor regulatory regime provides the best balance between providing incentives to the interconnector developers and owners to minimise cost and optimise performance, providing protection for consumers from excess cost and excess returns, and providing protection for debt-holders to ensure project financeability. Moreover, the CRU considers that adopting the Cap and Floor regime is consistent with the Greenlink's Cap and Floor regulatory treatment request. On this basis, the CRU has set out above its decision to accept Greenlink's request for a Cap and Floor regulatory regime for the Greenlink interconnector.

4.2. Do you agree with Greenlink's requested regime features?

Greenlink has requested the CRU to consider aligning the proposed Cap and Floor regime features closely to Ofgem's Cap and Floor. Greenlink's request to the CRU is based on a

modified version of Ofgem's default Cap and Floor design. Greenlink believes that the proposed regime should be closely aligned with GB and is of the view that this will facilitate a single debt offering to Greenlink and prevent perverse behaviours that could arise if the regime parameters are not aligned in the two jurisdictions.[24] The CRU requested respondents' opinions on the Greenlink's requested regime features.

Some respondents supported the Cap and Floor regime features that Greenlink proposed. One respondent noted that *"the Cap and Floor regime that is approved should align with Ofgem to ensure adequate financing"*

Most respondents noted that the CRU should ensure that the regime features that are requested by Greenlink are necessary for project finance. There could be a risk that aligning the features in totality with Ofgem's may put Greenlink at a competitive advantage against others operating in the market additionally this could lead to consumers underwriting too much of the cost risk. It was noted by respondents that the regime should ensure a fair sharing of risk between developers and consumers and the costs imposed on consumers are commensurate with the benefits they will receive.

Several respondents supported the move to one-year assessment periods. Moving from a five-year assessment period to a one-year assessment period may make transfers more frequent and on balance impose greater costs on consumers. Some respondents support a 25-year regime length.

Some respondent advised that the CRU should consider expanding the definition of force majeure, i.e. adding strike, lockout and other industrial disturbance in its definition.

Some respondents disagreed with Greenlink's proposal to use the actual cost of debt as opposed to the default notional cost of debt in setting the floor level of the regulatory regime. They noted that this could increase the level of the floor, potential cost to consumers and could reduce the incentive for developer to seek the lowest cost finance.

Some respondents noted that allowing for reserves to be included in the Regulated Asset Value (RAV) may shift risk from the developer to consumers. Same respondent expressed its concerns with regards to Greenlink's proposal for setting the cap and suggested that a conservative cap should apply bearing in mind the higher consumer exposure to the asset when a second interconnector comes on board. Moreover, the respondent has

[24] Certain Cap and Floor parameter values may differ between GB and Ireland to ensure the regime's relevance in both markets: for example, Greenlink suggests using different values for the prevailing inflation rate or corporate tax rate in GB and in Ireland

recommended to reject the incentive to operate when revenues are above the cap. A fundamental part of the Cap and Floor model is the return of revenues in excess of the cap to consumers.

One respondent opposes Greenlink's request that changes in Law, Regulation and Taxation are to be included as non-controllable costs.

Several respondents noted that the CRU should further consult on the final proposed features prior to deciding.

CRU Response

The CRU considered the points made by all respondents regarding Greenlink's requested regime features.

Greenlink has requested the CRU to consider aligning the proposed Cap and Floor regime features closely to Ofgem's Cap and Floor. The CRU highlights that Greenlink's position has continued to evolve since its Cap and Floor submission in August 2019, particularly in the context of Ofgem's regime variations consultation and Greenlink's response to that.

Greenlink in its request seeks to improve the financing conditions for the project, including the ability to finance it as a standalone asset. CRU would note that the Greenlink project is dependent on securing finance if it is to go ahead.

However, the CRU is of the view that Irish consumers should not be providing contingent support in lieu of investor equity for performance risks that are the responsibility of Greenlink. Additionally, the CRU notes that the Cap and Floor regime should promote cost efficiency and provide an appropriate allocation of risk between consumers, developers and other affected parties given the benefits and the risks that are proposed to be passed to the consumer.

The CRU welcomes the views and comments submitted regarding the key elements of Greenlink's Cap and Floor requests. The CRU notes that this paper is focused on the CRU's decision on the regulatory treatment of Greenlink.

The CRU is of the view that there is still a considerable level of specificity required on the detailed design of the regime to be completed and further consulted upon.

4.3. Are there other features the CRU should consider?

Greenlink has requested the CRU to consider a symmetrical Cap and Floor regime with Ofgem's regime[25]. Greenlink has requested the CRU to consider the proposed Cap and Floor regime features as a package, due to the interdependencies between the different features. Greenlink noted that certain proposed features are designed to balance risk for Greenlink while others provide additional safeguards for consumers. CRU requested respondents' views on the Greenlink's proposal and if there are any other specific features that the CRU should consider.

Some respondents noted that there is an uncertainty with respect to the economic impacts of COVID-19 and Brexit, which may develop and will need to be further considered.

Another respondent noted that the Cap and Floor should not be inflation linked, as neither the Capacity market nor Renewable Electricity Support Scheme (RESS) schemes are inflation linked.

A few respondents expressed their views with regards to re-financing gains from the changing cost of debt between construction and operation and some opposed this feature.

Another respondent noted that a more proportional sharing factor should be identified as the current value of 30% may be moving too much risk onto the consumer without improving the consumer benefit just to further increase the financeability of the project.

One respondent considered that the enduring operation of the interconnector should be considered further at this stage in the design of the revenue framework.

Some respondents agreed that revenues from congestion charges, the capacity market and the ancillary services market would be considered as the relevant revenues. Additionally, there was a suggestion that revenues from the auctioning of transmission rights also to be included.

Several respondents highlighted that a Cap and Floor regime should ensure a fair sharing of risk between developers and Irish consumers and that the costs imposed on Irish consumers are commensurate with the benefits they will receive.

[25] granted in principle

CRU Response

The CRU notes the views and comments submitted regarding the features that the CRU should consider.

The CRU acknowledges the points raised with regards to the COVID-19 and Brexit events. CRU notes that at this stage it is still unclear how and if there will be any impact on the Greenlink project costs as a result of the COVID-19 and Brexit events.

With regards to the enduring operation of the Greenlink interconnector. CRU notes that it has already engaged with the Transmission System Operator (TSO) on some key elements of Greenlink's Cap and Floor requests, e.g. annual assessments. CRU understands that Cap and Floor payments will be made between Greenlink and the TSO and will be distributed via Transmission Use of System Charge (TUoS) charging arrangements. CRU considers that this will require a process to be put in place to establish the payment terms and size of adjustments to TUoS once Cap and Floor payments are known.

CRU agrees with the respondents that a Cap and Floor regime should ensure a fair sharing of risk between developers and Irish consumers. CRU notes the recommendations submitted regarding the features the CRU should consider. CRU confirms that there is still considerable specification work on the detailed design of these regime elements to be completed and further consulted upon, before a Cap and Floor regime would be granted to Greenlink.

4.4. What are your views on the CRU's initial assessment of the requested features?

In the consultation paper (CRU20042) the CRU requested respondents' views on the CRU's initial assessment of the Greenlink requested features. Most respondents agreed with the CRU's assessment. Many respondents agreed with the CRU's high-level assessment criteria and the four metrics implemented by the CRU[26]. However, a few respondents noted that there are areas where it would be useful to understand the CRU's concerns in more detail, e.g. tailored cross-border split, 25-year regime duration, Irish cap rate of return, the floor rate of return, interest during construction, the minimum availability incentive, reserves in the RAV, and force majeure definition.

[26] deliverability, efficiency, incentives and simplicity

Some respondents noted that an interconnector availability incentive should be related to the availability of the interconnector to both the market, for trading purposes, and to the onshore system operators, for balancing purposes. This clarification would ensure that, in its operation, the interconnector owner focuses on the aspects which will deliver the most value to consumers.

Another respondent highlighted that if the actual cost of debt is utilised to calculate floor payments, there may be significant added complexity in monitoring ongoing refinancing and a negative impact on developer's incentives that may reduce Irish consumer benefits.

CRU Response

In considering Greenlink's requests, the CRU has reviewed each of Greenlink's regime features separately to identify which components might, in its view, be acceptable in principle, and which features could require further discussion with the developer to help protect Irish consumers' interests. The CRU's initial view was that Greenlink's requested features did raise some issues for the regime's deliverability, efficiency, incentives and simplicity. CRU notes that further detailed assessment of the Greenlink's Cap and Floor proposal, including the final project costs, is required before the form of an Irish Cap and Floor regime can be finalised.

CRU notes the views raised by the respondents. CRU agrees with the respondents' position on ensuring that project operational risks should not be supported by the floor, at least in the case where they can and should be mitigated by the project owner. On the other views expressed the CRU will further consult in Q1 2021, before the Greenlink's requests would be acceptable to be adopted in Ireland.

4.5. Should the CRU consider any other specific factors or elements in its initial assessment of the requested features?

Greenlink's regulatory framework request includes proposals that provide financial support to the project in light of its proposed project finance solution. These requests also impact the allocation of certain risks between the Irish consumer and Greenlink over the life cycle of the regulatory regime.

CRU requested respondents' views on the Greenlink's proposal and if there are any other specific factors or elements that the CRU should consider.

Some respondents noted that capacity limitations on the interconnector may increase risk that Irish consumers would need to top up the value of Greenlink's floor level.

Another respondent suggested that the CRU should consider a cap on the size if the debt related to the minimum availability incentive. Moreover, the respondent suggested that this incentive to the regime would only come into effect once the interconnector has been commissioned.

One respondent requested clarity on how the Greenlink interconnector will interact with the capacity market.

CRU Response

CRU acknowledges the respondent's concern that capacity limitations could potentially increase the risk that Irish consumers would need to top up the value of Greenlink's floor level.

CRU notes that at the next stage the CRU assessment will consider the impact of the Greenlink proposed regime features and the overall regulatory framework package on the allocation of risk between Greenlink and Irish consumers. In particular, the CRU will focus on how some of the project finance related regime features that Greenlink has requested might operate and impact different stakeholders if the project was affected by one or a series of Major Failure Events.

With regards to the minimum availability incentive, the CRU acknowledges the respondent's concern and will consider further when the CRU will be developing the detailed Cap and Floor revenue framework for Greenlink.

CRU also notes the above comment regarding the capacity market and will consider it when developing Greenlink's regulatory framework.

4.6. Other comments

Some respondents noted that the CRU should liaise closely with Ofgem on the assessments. However, other respondents expressed the view the CRU should determine regulatory structures that work best from an Irish consumer perspective without being unduly constrained by external regulatory decisions.

CRU Response

Greenlink has requested a closely aligned Cap and Floor regulatory regime in respect of 50% of Greenlink's regulatory asset value, operating costs and revenues, consistent with the

approach it has agreed in principle with Ofgem. CRU confirms that its assessment of the Greenlink's Cap and Floor request is consistent with Ofgem's proposed treatment of the project in GB. Furthermore, while considering the matter in the context of the Irish market, the CRU confirms that it will continue to engage closely with Ofgem in developing the Cap and Floor framework for Greenlink.

5. Next Steps

Fundamental to the Irish consumer value case is the detailed design of the cap and floor mechanism and whether the transfer of risk may or may not be appropriate. The CRU is of the view there are areas of detail that could protect the interests of Irish consumers by departing from certain aspects of Greenlink's request, to achieve a more efficient allocation of risk, improving incentives for the developer and simplifying the regime.

CRU would like to note that the next paper the CRU will publish regarding the Greenlink Interconnector will be a paper outlining the CRU's minded to position on the regulatory financial design of the Cap and Floor mechanism that would apply to Greenlink in Ireland. Moreover, this paper will include the initial Cap and Floor levels, which would apply to 50% of the costs of the project. This paper is expected to be published for consultation in Q1 2021.

In this paper the CRU will outline who bears the risks (Developer and Consumers) and at what level. This paper will take into account:

- updates to Greenlink's requested regime features[27];
- Ofgem's decisions on the regime variations, following its consultation on proposed changes to the default Cap and Floor regulatory framework for electricity interconnectors;
- further evidence relevant to the assessment of Greenlink's submission, i.e. taxation; etc;
- final project costs submission from the Greenlink developers;
- responses received to CRU20042.

Additionally, the CRU notes that it will continue to engage with Greenlink to address issues identified in the CRU's initial review of Greenlink's August 2019 submission. The CRU will also continue to engage with the Ofgem to explore the potential for a regulatory decision-making process and detailed cost assessment that takes both the Irish and GB regulatory separate decision-making processes into account. The CRU notes that a final decision on the Greenlink Cap and Floor is programmed for 2021.

[27] CRU notes that Greenlink's position has continued to evolve since its Cap and Floor submission in August 2019.