ASSESSMENT ON
THE NEED
FOR A REGULATED
OPERATING
REVENUE REGIME
FOR FUTURE
INTERCONNECTION

Approach Paper Consultation

03 December 2025





About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive and two Executive Directors lead teams in each of the main functional areas in the organisation: CEO Office; Price Controls; Networks and Energy Futures; and Markets and Consumer Protection. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.





ABSTRACT

This paper details the Utility Regulator's proposed approach towards our assessment on the need for a regulated operating revenue regime for a future interconnection project wishing to connect to Northern Ireland.

AUDIENCE

This approach paper will be of interest to all electricity licensees. Government departments, organisations representing consumer interests and other stakeholders will also be interested given the potential for greater transparency. It may also be of particular interest to other transmission licence holders.

CONSUMER IMPACT

TI LirlC Limited (TI) intend to build a 700MW interconnector between Northern Ireland and Scotland, known as LirlC, which is currently planned for completion in 2032. As part of TI's transmission licence application, they requested a regulated Cap and Floor revenue regime arrangement, akin to the process implemented by Ofgem. This is the first such request received by UR for a prospective interconnector development project.

The Authority's principal statutory objective is to protect the interests of consumers of electricity supplied by authorised suppliers, wherever appropriate, by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission, distribution or supply of electricity.

UR will undertake an assessment to establish if there is a need for a regulated operating revenue regime for the LirIC project. Therefore, this paper is seeking representations from stakeholders with regards to our proposed approach for this assessment.



Contents Page

1.	Executive Summary	5
2.	Introduction	7
	Purpose of This Document	
	Consumer Impact	
	Structure of the Paper	
3.	Interconnection Overview	
	Benefits of Interconnection	
	NI Interconnector Landscape	
4.	LirlC Interconnector Project	13
	Background	
	TI's Transmission Licence Application	
_	Ofgem's Regulatory Decisions	
5.	Funding Interconnector Development	
	Global Context	
_	Revenue Models	
6.	Assessing the Need for a Regulated Revenue Regime	
	Background	
	Purpose of This Assessment Key Stakeholders	
	External Consultancy Support	
	Scope of This Assessment	
	Proposed Assessment Criteria	20
	Assessment Findings	
	Assessment Timeline	
7.	Preliminary Work in Parallel	26
	Objective of Preliminary Work	
	Outline of Preliminary Work	
8.	Next Steps	28
	Summary of Consultation Questions	
	Publication of Responses	
	Next Steps	29
9.	Annex A - Overview of Cap and Floor for an Interconnector	70
	Operating Revenue Regime	JU



1. Executive Summary

This consultation paper sets out the Utility Regulator's (UR's) intended approach for our assessment on the needs case for a regulated operating revenue regime for a prospective interconnector development project wishing to connect to Northern Ireland.

This paper also aims to provide clarity on the purpose and scope of our assessment, as well as an anticipated timeline across several key milestones.

An interconnector is essentially an electricity transmission system that connects two different energy systems, often connecting neighbouring jurisdictions. Interconnectors facilitate the trade and transfer of electricity between connected systems, providing the ability to import or export electricity, depending on respective market conditions.

In Northern Ireland, anyone wishing to own or operate an interconnector can only do so lawfully where it is authorised by an electricity transmission licence, issued by UR. TI LirIC Limited (TI) applied to UR for a transmission licence for LirIC in May 2023.

TI LirlC Limited (TI) intends to build a 700MW interconnector between Northern Ireland and Scotland, known as the Lir Interconnector, or LirlC for short.

As part of TI's electricity transmission licence application, they requested specific arrangements around their operating revenue regime. TI LirlC indicated a preference for a Cap and Floor regime, which is akin to the process Ofgem hold for interconnector development projects in Great Britain (GB).

This is the first time UR has received a request for a regulated Cap and Floor revenue regime from a prospective interconnector project. Unlike Ofgem, UR does not have an established approach for granting such a regime, therefore we must undertake studies and analysis to assess whether a regulated regime is appropriate.

UR adopted a pragmatic two-step approach for the progression of Tl's licence application, step one of which concluded in December 2024 following the UR's grant of transmission licence to Tl¹ without any conditions pertaining to a regulated revenue regime.

¹ <u>Utility Regulator - Grant of Electricity Transmission Licence to TI LirIC Limited</u>



The work required under step two is now underway and includes UR's assessment on the needs case for a regulated operating revenue regime in respect of the prospective LirlC interconnector project. The assessment will include consideration of TI's request for a regulated Cap and Floor regime as well as wider interconnector revenue arrangements.

This paper outlines several aspects that we intend to consider during the course of our assessment. Additionally, we have outlined an anticipated timeline across a number of process milestones.

For clarity, we propose that the scope of this assessment is limited to initially understanding if there is a potential <u>need</u> for establishing a regulated revenue regime for the LirlC interconnector project.

We intend to publish a Draft Determination for consultation in Q3 2026, with the aim of outlining our minded to position based on the findings of this assessment.

Following receipt and consideration of any responses to the Draft Determination, we aim to publish a Final Determination on this assessment in Q4 2026, as detailed in the UR's Forward Work Programme for 2025-2026.²

This paper also outlines preliminary work we intend to undertake in parallel with this process, with the objective of providing future process efficiencies should this assessment find in favour of establishing a regime. Continuation of this preliminary work undertaken will remain subject to the outcome of the Final Determination on this assessment.

UR welcomes stakeholder responses to the questions posed in this approach paper by **15 January 2026**. Feedback should be submitted via email to iclicence@uregni.gov.uk.

6

² <u>UR Forward Work Programme 2025-2026</u> see page 16, ref 2.2



2. Introduction

Purpose of This Document

- 2.1 This document outlines the approach that the Utility Regulator (UR) intends to take to assess the needs case for a regulated operating revenue regime for a prospective NI interconnector development project.
- 2.2 This document also aims to provide clarity on the purpose and scope of our assessment, along with an anticipated timeline across a number of key milestones. Subject to the outcome of this assessment, an outline of preliminary work and potential future work has also been provided.
- 2.3 This assessment forms part of a wider UR strategic objective on interconnection regulation, as detailed within UR's Forward Work Programme for 2025-2026.³
- 2.4 We welcome stakeholder views on our proposed approach as well as any other aspects relevant to our assessment. UR will consider all feedback received and will commence the assessment using modelling techniques and cost benefit analysis to determine whether a regulated revenue regime, such as a Cap and Floor regime requested by TI, is appropriate for Northern Ireland (NI).
- 2.5 UR reserves the right to make refinements to our approach during the course of this assessment.
- 2.6 Annex A also provides a high-level overview of interconnector revenue models mainly focusing on standard features of a Cap and Floor regime, given TI's request.

Consumer Impact

2.7 UR's mission is to protect the short and long-term interests of consumers. Electricity interconnectors are physical links which allow electricity to flow across borders and have the potential to bring significant benefits to consumers, such as strengthening energy security. General benefits of interconnection are discussed further within Section 3.

³ <u>UR Forward Work Programme 2025-2026</u> see page 16, ref 2.2



- 2.8 TI requested a Cap and Floor regulated regime as part of their transmission licence application for their LirlC Project. This is the first time the UR have received such a request for a prospective NI interconnector.
- 2.9 The Cap and Floor regime was established by Ofgem in 2014 to incentivise the delivery of developer led interconnector projects in GB and to protect consumers. The regime sets a yearly maximum (Cap) and minimum (Floor) level for the revenues that an interconnector can earn over a 25-year period⁴ and are based on project costs.
- 2.10 Ofgem conduct Cap and Floor assessments for prospective interconnector development projects by way of application "windows" which are periodically opened for applications at Ofgem's discretion.
- 2.11 A recent Ofgem press release stated that "Since its launch in 2014 the regime has through capping revenues, delivered £200m back to consumers through reduced bills over the past decade. Since its inception floor payments have never needed to be made, thereby ensuring value for money for consumers, as well as demonstrating the commercial viability of interconnectors."⁵
- 2.12 In GB, the financial costs associated with the regime are managed via their transmission charges mechanism⁶, which are primarily applied to generators and suppliers. These costs are subsequently incorporated within consumers energy bills. Ofgem's regime framework is discussed further in Section 4.
- 2.13 The need for such a regime for a prospective NI interconnector development project has not yet been established, therefore the potential impact on NI consumers is currently unknown.
- 2.14 This assessment will consider the need for a regime in respect of the LirlC project at this stage. UR will consider any further requests of this nature on a project-by-project basis, rather than a general openwindow application process as is currently implemented by Ofgem.

⁴ <u>Ofgem - Interconnector Cap and Floor Regime Handbook</u>, page 8

⁵ Ofgem - Press Release 'Empowering Great Britain for a clean and flexible energy future with the next generation of interconnectors' 12 November 2024

⁶ Further details regarding GB's TNUoS (Transmission Network Use of System) Charges can be found on the <u>National Energy System Operator (NESO) website</u>



- 2.15 This document outlines our proposed approach for the extensive analysis required to understand the potential cost benefit and social economic welfare for NI. We consider that any prospective Northern Ireland interconnector must:
 - be proposed by an applicant which has the technical capability and financial backing to successfully develop the interconnector;
 - have the potential to bring long-term economic benefits to consumers in NI, including in particular the benefits of environmental sustainability; and
 - have the potential to improve security of supply.
- 2.16 More information is expected to be known as this work progresses and we intend to provide further details during the course of our assessment, as detailed further within Section 6.
- 2.17 This document also provides an outline of the preliminary work we intend to undertake in parallel with this initial assessment process, however the progression of such work will remain subject to the outcome of this process. Please see Section 7 for further details.

Structure of the Paper

- 2.18 This paper is structured as follows:
 - Section 1 provides an Executive Summary of the paper.
 - Section 2 (this section) provides an introduction to the paper.
 - Section 3 provides a general overview on interconnection.
 - Section 4 provides an overview of the LirIC Interconnector Project.
 - Section 5 provides an overview of general interconnector development funding approaches.
 - Section 6 provides details our proposed approach towards assessing the need for a regulated revenue regime, along with details of the scope of this assessment as well as our proposed assessment criteria. It also outlines the estimated timeline for anticipated milestones, through to the conclusion of this assessment in Q4.



- Section 7 outlines other preliminary work to be conducted in parallel with this workstream.
- Section 8 details our proposed next steps and contains a summary of the consultation questions posed.
- Annex A provides a high-level overview of the Cap and Floor revenue regime and outlines potential future work dependent on the outcome of this assessment.



3. Interconnection Overview

Benefits of Interconnection

3.1 Electricity interconnectors can help to resolve the energy trilemma as they have the ability to increase security of supply, facilitate the transition to a low carbon future and create price arbitrage between connected energy markets. Interconnectors primarily obtain their revenues from sales of interconnection capacity to market participants who wish to move electricity between markets with different prices (congestion rent). The interconnector operator collects this "rent" by selling capacity and managing flows from the higher-priced to the lower-priced market, with the total revenue depending on the magnitude and volatility of price differences, and the volume of power traded.

NI Interconnector Landscape

- 3.2 Currently there is no established policy in Northern Ireland on the need for further interconnection. Studies and research are needed to determine whether, and if so, how much additional interconnection may be required or otherwise useful to have for security of supply purposes.
- 3.3 UR have been working in cooperation with the Department for the Economy (DfE) to progress the development of interconnector policy as advised in the DfE Business Plan 2025-26⁷. In parallel to this we have also been progressing the work required to understand whether there are benefits to establishing a regulated revenue regime for the prospective LirlC interconnector project.
- 3.4 As detailed in the UR Forward Work Programme 2025-2026^{8,} we are working to develop a robust regulatory process to facilitate interconnection that promotes further market competition and continue the two-step approach in respect of TI's licence application through assessing the need for a regulated operating revenue regime.
- 3.5 In terms of neighbouring jurisdictions, both GB and Ireland have established interconnection policy as well as an established

⁷ Department for the Economy Business Plan - 2025-26 see page 20

⁸ UR Forward Work Programme 2025-2026 see page 16, ref 2.2



- regulated interconnector revenue regime framework in the form of a Cap and Floor regime.
- 3.6 At present, the Moyle Interconnector provides a link between Northern Ireland and Scotland. It is the only interconnector geographically located in Northern Ireland and is one of three subsea interconnectors currently in operation within the Single Electricity Market (SEM), all of which link the SEM to the GB energy market.
- 3.7 SEM's newest SEM-GB interconnector, Greenlink, was the first project to request a Cap and Floor regime from the Regulatory Authority in Ireland, the Commission for Regulation of Utilities (CRU). Greenlink was granted a Cap and Floor regime by both Regulatory Authorities (Ofgem and CRU) via their established frameworks for such requests.
- 3.8 A fourth subsea SEM interconnector, known as Celtic, is currently in construction between Ireland and France. Once operational, the Celtic Interconnector will link the SEM with European energy markets. The Celtic project is a joint venture between the transmission system operators (TSOs) in Ireland (EirGrid) and France (RTE).
 - Q1. Do respondents have any views regarding additional interconnection in Northern Ireland that you would like to highlight? If so, please provide details.



4. LirIC Interconnector Project

Background

- 4.1 The LirlC Project is a large infrastructure project for Northern Ireland.
- 4.2 TI intends to build a 700MW HVDC sub-sea interconnector between Northern Ireland and Scotland, known as LirIC. Additional interconnection may facilitate further competition between the Single Electricity Market (SEM) and GB markets where opportunities for price arbitrage could also increase.
- 4.3 LirlC will comprise of two HVDC converter stations, one located in Scotland and the other in Northern Ireland. These converter stations will connect LirlC to the 275kV High-Voltage network in Northern Ireland and the 400kV High-Voltage network in Scotland. Two 320kV HVDC cables will connect the two converter stations and be buried underground or under the bed of the Irish Sea. The total cable route length of LirlC is expected to be around 142km.9

Figure 4.1: Outline map of LirlC connection¹⁰



TI's Transmission Licence Application

4.4 When TI applied to UR for an electricity transmission licence, the developer indicated a preference for LirlC's operational revenue to be regulated under a Cap and Floor regime. This form of regulatory regime has not been offered in Northern Ireland before and will take time to determine if appropriate.

⁹ Source: <u>LirIC - Transmission Investment</u>

¹⁰ As above - Source: <u>LirIC - Transmission Investment</u>



- 4.5 UR adopted a pragmatic two-step approach for the progression of TI's licence application so as to not unduly delay the project.
- 4.6 Step one proposed the grant of a licence without any regulated revenue regime conditions, whilst step two would allow further time for UR's assessment on the appropriateness of regulated revenue regime following TI's request for a Cap and Floor arrangement.
- 4.7 Step two also recognised the work to be progressed by the Department for the Economy (DfE) in partnership with UR, in relation to interconnector policy.
- 4.8 UR published the 'Consultation on proposal to grant an electricity transmission licence to TI LIRIC LIMITED' on 30 May 2024. The consultation set out the rationale for the proposed two-step approach and provided an outline of the future work anticipated under step two.
- 4.9 Step one of the two step approach concluded with the grant of a transmission licence to TI LirIC Limited in December 2024¹², without any licence conditions pertaining to a regulated operating revenue regime.
- 4.10 The work required under step two is now underway including this assessment on establishing the needs case for a regulated revenue regime for the prospective LirlC interconnector project.
- 4.11 UR's mission is to protect the short and long-term interests of consumers of electricity, gas and water and as such this is at the forefront of the analysis to be undertaken throughout our assessment.

Ofgem's Regulatory Decisions

- 4.12 Ofgem granted TI an interconnector licence¹³, which was recently updated¹⁴ to account for the appropriate connection point, Hunterston, on the GB side.
- 4.13 In November 2024, Ofgem also granted LirlC with a Cap and Floor

¹¹ <u>Utility Regulator - Consultation on proposal to grant an electricity transmission licence to TI LirIC Limited</u>

¹² <u>Utility Regulator - Grant of Electricity Transmission Licence to TI LirIC Limited</u>

¹³ Ofgem - TI LirlC Ltd - Notice of grant of an electricity interconnector licence (July 2021)

¹⁴ Ofgem - TI LirIC Limited: notice of grant of an electricity interconnector licence (Sept 2025)



- regime in principle¹⁵ following their Window 3 Initial Project Assessment (IPA) application. Ofgem's IPA considered the 'needs case' for a prospective project.
- 4.14 Ofgem's IPA grant in principle for LirIC remains subject to several conditions, including a requirement to submit detailed cost information for a Final Project Assessment (FPA) within three years of the IPA decision i.e. by the end of 2027 at the latest.
- 4.15 Under Ofgem's current framework, provisional Cap and Floor levels are set at the FPA stage. Final levels are set following their Post Construction Review (PCR) stage which assesses a project's final costs after construction. Further information on Ofgem's assessment framework can be found within their Interconnector Cap and Floor Regime Handbook.¹⁶
- 4.16 UR will continue to engage with Ofgem during our needs case assessment to ensure a holistic approach is taken in respect of the separate regulatory approaches in both NI and GB, either side of the interconnector.
 - Q2. Do respondents have any additional considerations they believe should be included within the step two workstream? If so, please provide details.

¹⁵ <u>Ofgem - Decision on the Initial Project Assessment of the Third Cap and Floor Window for Electricity Interconnectors</u>

¹⁶ Ofgem - Interconnector Cap and Floor Regime Handbook



5. Funding Interconnector Development

Global Context

- 5.1 Electricity interconnector projects aim to develop and deliver largescale infrastructure links between two or more energy systems. Funding arrangements and ownership models vary from project to project across the world.
- 5.2 Some projects may receive full government funding on both sides of the connection, whilst others may seek to establish funding arrangements via government grants, regulatory frameworks such as the Cap and Floor regime, private investment or indeed a mix of the aforementioned approaches.
- 5.3 Additionally, funding arrangements may be required throughout the full project lifecycle i.e. from early initiation stages, construction and development, through to commissioning and day to day operations.

Revenue Models

- 5.4 There are generally three main commercial interconnector developer ownership models, each of which determines who bears the financial costs associated with developing, owning and operating the asset.
- 5.5 An overview of each model is provided below:
 - **Merchant model** in a merchant model the developer bears 100% of the financial risk and benefits.
 - Fully regulated model investments are recovered through network tariffs. The majority of the revenue risk is held by consumers, subject to the interconnector meeting minimum operating requirements.
 - Cap and Floor Model this is deemed a 'middle ground' between merchant and fully regulated. The regime was designed by Ofgem with the aim of protecting consumers by ensuring that any excess revenue earned by the interconnector developer above the Cap is returned to the GB energy system, while any revenue falling short of the Floor is



topped up by consumers.

- The Floor is a guaranteed minimum amount of revenue that an interconnector can earn. This means that if an interconnector does not earn sufficient revenue, they will be 'topped up' to the Floor level.
- The Cap is the maximum revenue entitlement that an electricity interconnector can earn. Should the interconnector revenue exceed the Cap, the additional monies are returned to electricity consumers.
- 5.6 TI requested a Cap and Floor revenue regime arrangement for LirIC as part of their UR transmission licence application. This is the first such request received by the UR for a prospective interconnector development project.
- 5.7 This paper focuses on UR's assessment to establish if there is a need for a regulated operating revenue regime for the prospective LirlC interconnector project.
 - Q3. Are respondents aware of any other interconnector revenue models outside of those listed above? If so, please provide details for any other models considered to be available.



6. Assessing the Need for a Regulated Revenue Regime

Background

- 6.1 As detailed in UR's Forward Work Programme 2025-2026¹⁷, we are working to develop a robust regulatory process to facilitate interconnection that promotes further market competition, whilst also continuing the two-step approach in respect of TI's licence application for the LirlC project.
- This is the first request of its kind to be received by the UR. We will assess any new interconnector project developer requests on a case-by-case basis, if received.

Purpose of This Assessment

- 6.3 The purpose of this assessment is to initially establish whether there is a **need** for a regulated operating revenue regime for the prospective LirlC interconnector.
- 6.4 We will undertake an extensive research and modelling assessment, adhering to the following principles where further interconnection will:
 - be proposed by an applicant which has the technical capability and financial backing to successfully develop the interconnector;
 - have the potential to bring long-term benefits to consumers in NI, including in particular the benefits of environmental sustainability; and
 - have the potential to improve security of supply.
 - 6.5 Additionally, this assessment will incorporate the work undertaken in cooperation with the Department for the Economy (DfE) to progress the development of interconnector policy as advised in the DfE Business Plan 2025-26.¹⁸

¹⁷ <u>UR Forward Work Programme 2025-2026</u> – see page 16, ref 2.2

¹⁸ Department for the Economy Business Plan - 2025-26 - see page 20



Key Stakeholders

- 6.6 UR will engage with several key stakeholders during the course of this assessment, such as but not limited to: DfE, TSOs SONI & EirGrid, Ofgem, CRU, TI LirIC Limited etc.
- Operators (TSOs) for Northern Ireland and Ireland respectively as outlined within the proposed assessment criteria section below. The TSOs are responsible for the operation of the electricity transmission system day to day, as well as planning the future of the transmission grids in their respective jurisdictions.
- 6.8 UR will continue to engage with Ofgem to ensure a holistic approach is taken in respect of the separate regulatory approaches in both Northern Ireland and GB.
- 6.9 UR will also continue to engage with TI as their LirlC project progresses in parallel, to ensure we have all relevant and up to date information required for our assessment.

External Consultancy Support

6.10 UR will conduct this assessment with the support of external consultants, with industry expertise in this area, given the expansive scope of analysis proposed. We aim to conduct a tender exercise for this assignment imminently.

Scope of This Assessment

- 6.11 For clarity, we propose that the scope of this assessment is limited to understanding if there is a potential **need**, i.e. benefit(s) for NI, for establishing a regulated revenue regime for the LirlC interconnector project.
- 6.12 UR reserves the right to make refinements to our approach during the course of this assessment.
- The progression of any future work referenced within this document, including any work undertaken in parallel, will remain subject to the outcome of this assessment process as outlined within Section 7.



Proposed Assessment Criteria

- 6.14 UR propose to conduct an assessment of the merits of the LirIC project across four criteria, to include detailed modelling across a number of scenarios.
- 6.15 The LirIC project aims to provide an interconnector capacity increase of up to 700MW between the SEM and GB electricity markets once operational. Our assessment will therefore consider a potential interconnector capacity increase of up to 700MW.
- 6.16 It is anticipated that LirIC will be operational by end of 2032, therefore this timeframe will be considered throughout our assessment.
- 6.17 Further details of the proposed assessment criteria are provided in Table 6.1 below.



Table 6.1: Detailed Assessment Criteria

	Criterion	Additional detail
A	Market Modelling Assessment	To assess and quantify the potential impact of increased interconnector capacity for NI and the SEM, for example: 1. Socio-economic welfare 2. Decarbonisation 3. Security of Supply
В	System Impact Assessment	To assess and analyse the impact of increased interconnector capacity on the NI electricity system as well as the collective SEM electricity system, for example: 1. Future generation and demand 2. System and network constraints 3. Interconnector dispatch
С	Cost and Technical Assessment	To assess and analyse LirlC project's approach and costs, to include consideration of wider interconnector revenue arrangements, for example: 1. Capacity Remuneration Mechanisms 2. Congestion Income / Transmission Rights 3. Future Arrangements for System Services (FASS)
D	Deliverability Assessment	To assess and consider the financial feasibility of the LirlC project meeting the current proposed operational date of 2032, considering the project: 1. With a regulated revenue regime, including a Cap and Floor model; and, 2. Without a regulated revenue regime, i.e., merchant model



A) Market Modelling Assessment

- 6.18 As noted above, we intend to undertake market modelling to assess and quantify the potential impact of increased interconnector capacity of up to 700MW for NI and the SEM across a number of key metrics, for example, in relation to socio-economic welfare (SEW), decarbonisation and security of supply.
- 6.19 We will be seeking to understand whether a positive SEW exists for consumers, producers and interconnectors. We want to understand the cost to the consumer both in the short and long-term, the impact on wholesale electricity prices and potential interconnector revenue arrangements.
- 6.20 It is understood that interconnectors can help to mitigate the energy trilemma as they have the ability to increase security of supply, facilitate the transition to a low carbon future and create price arbitrage across connected markets. We aim to provide the outputs of this modelling work alongside a Draft Determination paper in Q3 2026.

B) System Impact Assessment

- 6.21 We intend to engage with the SEM TSOs further to support the assessment and analysis of the impact of increased interconnector capacity of up to 700MW on the NI electricity system as well as the collective SEM electricity system.
- 6.22 We will consider, in conjunction with the TSOs, factors such as future generation and demand, system and network constraints which will include dispatch down, and interconnector dispatch arrangements. Modelling will also need to take place with various scenarios, including both with and without the second north south tie line.

C) Cost and Technical Assessment

- 6.23 For the cost and technical assessment, we propose to collect financial data for the LirIC interconnector project, which would cover both the anticipated construction phase as well as the potential lifespan of a typical Cap and Floor regime, i.e. 25-year period from 2032 onwards.
- 6.24 We will be requesting information from TI in the form of a high-level cost assessment, similar to Ofgem's Initial Project Assessment (IPA). We intend to request this information in December 2025.



- 6.25 This request will include details surrounding operational expenditure (OPEX) and capital expenditure (CAPEX) as well as depreciation, tax and decommissioning costs.
- 6.26 We will also seek to understand the revenues anticipated and consider all potential interconnector revenue arrangements and revenue stacking such as the provision of system services, capacity remuneration mechanism participation, congestion income and tariff mechanisms.

D) Deliverability Assessment

- 6.27 We intend to assess and consider the financial feasibility of the LirlC project meeting the current proposed operational date of 2032, considering the scope of the project both with a regulated revenue regime of varying forms, as well as without any form of regulated regime i.e. merchant model.
- 6.28 Our assessment will consider the maturity of the project, its immediate timescales and the technical capability and financial backing of the owner to successfully develop an interconnector.
- 6.29 For this deliverability assessment, we intend to consider the stage of the NI connection offer process, licence process, the project plans including grid connection status in the connecting country (GB), supply chain plans and the developer's financing strategy. Note this list is not exhaustive and we would welcome stakeholder views on the scope of the assessment criteria.

Assessment Findings

- 6.30 UR intend to publish a Draft Determination for consultation in Q3 2026, with the aim of outlining a minded to position on the need for a regulated revenue regime based on the findings of this assessment.
- 6.31 The consultation may also include details of the analysis and assessment conducted throughout the first half of 2026. UR may initiate a further consultation during this assessment process, subject to any interim findings.
- 6.32 Following receipt and consideration of any responses to the Draft Determination consultation, a Final Determination on this assessment on the need for a regulated operating revenue regime is



expected in Q4 2026, as detailed in the UR's Forward Work Programme for 2025-2026.¹⁹

Assessment Timeline

6.33 The indicative timeline in Table 6.2 below highlights the various stages of our proposed approach for this needs case assessment process, alongside the anticipated timeframe for each milestone.

Table 6.2: Regulated Revenue Regime Assessment Indicative Timeline

Date	Milestone
December 2025	Approach Paper Consultation published (this document)
December 2025	High Level Cost Assessment information request issued to TI
January 2026	Approach Paper Consultation Closes
February 2026	High Level Cost Assessment to be submitted by TI
August 2026	UR to publish Draft Determination Consultation
October 2026	Draft Determination Consultation closes
December 2026	UR to publish Final Determination

- 6.34 TI LirIC Limited's electricity transmission licence does not currently contain any revenue regime conditions. Should our Final Determination find in favour of progressing a regime, Tl's licence will require modification to incorporate this into their licence.
- 6.35 Any proposed modification(s) in respect of TI's licence will be subject to a separate consultation process. An indicative timeline is outlined in Table 6.3 below however, <u>please note that the following licence</u>

¹⁹ <u>UR Forward Work Programme 2025-2026</u> – see page 16, ref 2.2



modification milestones remain subject to UR's Final Determination and will not be initiated should the UR decide <u>not</u> to progress a revenue regime.

Table 6.3: Indicative Licence Modification Timeline

Date	Milestone
March 2027	UR to publish LirIC Licence Modification Consultation
April 2027	Consultation on LirIC Licence Modification closes
June 2027	UR to publish Decision on LirIC Licence Modification

Q4. Do respondents agree with the criteria and principles to be applied during this assessment? If not, please provide details of other criteria/principles that may also warrant consideration.



7. Preliminary Work in Parallel

Objective of Preliminary Work

- 7.1 This section outlines the preliminary work we intend to undertake in parallel with this process as well as our rationale for initiating this work.
- 7.2 LirIC is a large-scale cross jurisdictional electricity transmission project which requires collaborative and continued engagement across a wide range of stakeholders. For UR, this includes significant engagement with Ofgem as the project develops, to ensure a holistic approach is adopted for regulatory arrangements in our respective jurisdictions.
- 7.3 Unlike Ofgem, UR does not have an established framework in place to evaluate the necessity of implementing a regulated revenue regime for a prospective interconnector project.
- 7.4 Should this needs case assessment find in favour of establishing a revenue regime, we anticipate that the preliminary work undertaken will provide a valuable foundation for further regulatory engagement. Additionally, this work aims to provide time efficiencies should further detailed assessments be required.
- 7.5 For clarity, the progression of this work remains contingent on the outcome of this assessment as well as the consideration of stakeholder feedback on any minded to position.

Outline of Preliminary Work

- 7.6 Ofgem's IPA grant in principle for LirIC remains subject to several conditions, including a requirement to submit detailed cost information for a Final Project Assessment (FPA) within three years of the IPA decision i.e. by the end of 2027 at the latest.
- 7.7 It is anticipated that Ofgem will consider and set <u>preliminary</u> Cap and Floor levels for LirIC at their Final Project Assessment (FPA) stage.²⁰
- 7.8 TI may commence preparations for Ofgem's FPA stage between Q3 and Q4 2026, with the development of a submission regarding their

²⁰ Further details on Ofgem's assessment process can be found within the <u>Ofgem - Interconnector</u> <u>Cap and Floor Regime Handbook</u> – see Section 3



- detailed cost information. At that stage, we consider TI may have advanced their tender process and award of contracts for preconstruction and construction works for the LirlC project.
- 7.9 Should TI progress as anticipated, we will likely request that TI also submit their detailed cost information to UR in parallel with their Ofgem FPA submission, once that timeline becomes more certain, so that we can commence a further detailed assessment of the project's mature costs.
- 7.10 UR intend to initiate a separate assessment process on TI's detailed cost data that may take place in parallel to the Draft Determination consultation in Q3 2026. This separate but linked process may also include work to further consider the development of a regulated operating revenue regime framework.
- 7.11 **Please note:** the progression of this work will remain wholly dependent on the outcome of the consultation process which won't be formally known until the Final Determination in Q4 2026 (Ref Table 6.2).
- 7.12 Should the needs case assessment determine a regulated revenue regime is not beneficial to NI, then development work on the potential regulated operating revenue regime framework will cease.
- 7.13 Should the needs case assessment determine a regulated revenue regime is beneficial to NI, then the work undertaken on the development of a regulated revenue regime framework will have provided timeline efficiencies to allow UR to adopt an approach aligned to Ofgem's process to assess the appropriate levels.
- 7.14 For the avoidance of doubt, note that any subsequent workstream to take place outside of this assessment will be subject to separate formal consultation process(es).
- 7.15 An approach paper pertaining to this separate preliminary work in respect of a potential regime framework will be published in the near future and more information on the indicative timelines associated with this parallel work is provided in Annex A.
 - Q5. Do respondents support the proposed parallel work to be commenced in Q3 2026 regarding the development of a regulated operating revenue regime framework? If not, please provide supporting details.



8. Next Steps

Summary of Consultation Questions

- 8.1 This is an open consultation where UR are keen to hear the views of interested stakeholders and consumers on any issues connected with this approach to our assessment. We are seeking stakeholder views on the questions posed in this consultation which are summarised below:
 - Q1. Do respondents have any views regarding additional interconnection in Northern Ireland that you would like to highlight? If so, please provide details.
 - Q2. Do respondents have any additional considerations they believe should be included within the step two workstream? If so, please provide details.
 - Q3. Are respondents aware of any other interconnector revenue models outside of those listed above? If so, please provide details for any other models considered to be available.
 - Q4. Do respondents agree with the criteria and principles to be applied during this assessment? If not, please provide details of other criteria/principles that may also warrant consideration.
 - Q5. Do respondents support the proposed parallel work to be commenced in Q3 2026 regarding the development of a regulated operating revenue regime framework? If not, please provide supporting details.
- Responses to this consultation should be submitted via email to iclicence@uregni.gov.uk by **15 January 2026**.

Publication of Responses

- 8.3 We plan to publish the responses received to this approach paper. We may also publish a summary of how we have addressed them in finalising our approach to this assessment.
- 8.4 If you do not want all or part of your response or name made public, please state this clearly by marking the response as 'CONFIDENTIAL'.

 Any confidentiality disclaimer that this automatically produced by an



- organisation's IT system or is included as a general statement in your fax or coversheet will be taken to apply only to information in your response for which confidentiality has been specifically requested.
- 8.5 If you want other information that you provide to be treated as confidential, please be aware that, under the Freedom of Information Act 2000, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential.
- 8.6 Information provided in response to this approach paper, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily Freedom of Information Act 2000 and the Data Protection Act 2018).
- 8.7 As stated in the GDPR Privacy Statement for consumers and stakeholders, any personal data contained within your response will be deleted once the matter being consulted on has been concluded though the substance of the response may be retained.
- 8.8 Copies of all documents can be made available in large print, Braille, audio cassette and a variety of relevant minority languages if required.

Next Steps

- 8.9 Having considered the responses to this approach paper, we plan to publish our Draft Determination on this regulated revenue regime assessment in O3 2026.
- 8.10 Following receipt and consideration of any responses to the Draft Determination, we expect to publish a Final Determination on this assessment in Q4 2026.



9. Annex A - Overview of Cap and Floor for an Interconnector Operating Revenue Regime

Introduction

- 9.1 It is important to emphasise that the comments, timelines and aspects posed for further consideration within this annex are all wholly dependent on the outcome of the extensive analysis and assessment work to be conducted throughout 2026 concerning the needs case for a regulated revenue regime.
- 9.2 UR are considering initiating a further assessment of mature cost data in Q3 / Q4 2026. During this timeframe, it is expected that the analysis and assessment work will have largely concluded, with a Draft Determination open for consultation which will provide UR's 'minded to' position and supporting evidence (evidence either for or against a regulated regime being progressed).
- 9.3 Given the time constraints associated with this work, it may be best to commence this work in parallel to Ofgem and to the Draft Determination consultation.
- 9.4 We would like to highlight that, should the outcome of the needs case assessment process determine a regulated revenue regime is not beneficial to NI, then development work on the potential regulated operating revenue regime framework will cease.
- 9.5 Should the outcome of the needs assessment process determine a regulated revenue regime is beneficial to NI, then the work undertaken on the development of a regulated operating revenue regime framework will have provided timeline efficiencies to allow UR to adopt an approach aligned to Ofgem's process to assessing appropriate regime levels.
- 9.6 Below we provide some high-level information regarding the Cap and Floor regime to provide some areas for consideration. We intend to publish a separate approach paper shortly, 'Regulated Operating Revenue Regime Framework', concerning some of the areas below and aspects to be considered in this potential future assessment.
- 9.7 For the avoidance of doubt, please note that this will be subject to separate consultation process(es).



- 9.8 The Regulated Operating Revenue Regime Framework Approach paper is currently being developed and is expected to be published soon. Stakeholder feedback will help to shape our approach to this separate assessment, with a submission template to be developed over the coming months. TI may provide the mature cost data submission by Q4 2026, and work will subsequently commence on its assessment.
- 9.9 As stated above, should the assessment on the need for a regulated revenue regime indicate it is not beneficial to progress for NI, then this work will cease.
- 9.10 Should the assessment on the need for a regulated revenue regime indicate it is beneficial to progress for NI, UR will continue to assess the mature cost submission leading to a potential draft determination consultation on the regulated operating revenue regime framework, followed by a final determination paper which will incorporate stakeholder feedback.
- 9.11 This would allow UR to establish preliminary levels of revenue akin to the Ofgem FPA stage. Should this process continue, this would again be further developed at a similar Post Construction review stage, when the interconnector has been achieved approximately 90%+ of the construction process. This stage works to further refine the levels as necessary.

Cap and Floor Regime

- 9.12 The Cap and Floor regime was established by Ofgem in 2014 to incentivise the delivery of developer led interconnector projects in Great Britain (GB). The regime sets a yearly maximum (Cap) and minimum (Floor) level for the revenues that an interconnector can earn over a 25-year period.²¹
- 9.13 Ofgem's regime framework aims to protect consumers by ensuring that any excess revenue earned by the interconnector developer above the Cap is returned to the GB energy system, while any revenue falling short of the Floor is topped up by consumers.
- 9.14 In GB, the financial costs associated with the regime are managed via their transmission charges mechanism²², which are primarily

²¹ Ofgem - Interconnector Cap and Floor Regime Handbook, see page 8

²² Further details regarding GB's TNUoS (Transmission Network Use of System) Charges can be found on the <u>National Energy System Operator (NESO) website</u>



- applied to generators and suppliers. These costs are subsequently incorporated within consumers energy bills.
- 9.15 UR will take these aspects into consideration, as protecting the interests of consumers will be at the forefront of our assessment and our decision(s).
- 9.16 This document outlines a high-level approach to the work planned in respect of this assessment throughout 2025-2027 and seeks stakeholder representations. This paper is focussed on the needs case assessment; however, this section specifically provides information on a Cap and Floor regime. This will be elaborated on in our forthcoming approach paper on the Regulated Operating Revenue Regime Framework as mentioned in Section 7.
- 9.17 Whilst the mature cost data submission from TI is anticipated by Q4 2026, UR will have a minded to position subject to public consultation at that juncture with regard to whether there is a benefit to a regulated revenue regime. The Final Determination will also take into consideration responses to the consultation process. Should the Final Determination on the needs case assessment find in favour of no regulated revenue regime, work will cease on this aspect.
- 9.18 The Cap and Floor regime was developed by Ofgem with a typical length of 25 years. The Commission for Regulation of Utilities (CRU) in Ireland followed a similar pathway as that developed by Ofgem when they first introduced a Cap and Floor regime for the Greenlink Interconnector. They also retained the 25-year length of the regulated revenue regime.
- 9.19 Dependent on the outcome of the needs case analysis as discussed in the main body of the paper, UR considers that any potential Cap and Floor regime would be estimated to follow the regime length of 25 years from the date of operation, i.e., 25 years in length commencing from 2032. It is standard for both Ofgem and CRU for any Cap and Floor regime to start from either full commissioning or 12 months after the target commissioning date if commissioning is delayed. UR would intend to follow this established process.
- 9.20 Given the typical length of a Cap and Floor regime, it is not feasible to have a set Cap and Floor level for a prolonged period of time, especially in an evolving market as we work towards our net zero

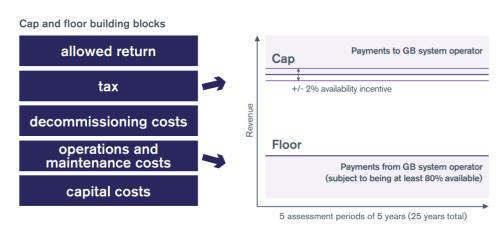


- ambitions. Therefore, it is important to set appropriate intervals for assessment periods.
- 9.21 Assessment periods are regular intervals for reviewing the Cap and Floor levels and ensuring consistency with maintaining project viability. Ofgem have regular assessment periods²³ which are every five years by default, therefore five assessment periods in total. When CRU developed their Cap and Floor regime for Greenlink they set their assessment periods initially as individual, one year, assessment periods.
- 9.22 It is also important to set the revenue levels within these assessment periods, such that any excess or shortfall against the Cap and Floor cannot be carried into the following assessment period.
- 9.23 Given these slight differences between the GB and Ireland Cap and Floor regime, UR will seek stakeholder views on the appropriate interval for assessment periods should a Cap and Floor regime be determined to be beneficial to NI in potential future papers.

Cap and Floor Building Blocks

- 9.24 Ofgem developed the Cap and Floor model in order to encourage investment in electricity interconnectors. The Cap and Floor levels are built from building blocks of capital costs, operations and maintenance costs, decommissioning costs, tax and allowed return.
- 9.25 The levels are then profiled so that they are flat over time in real terms. This is demonstrated in Figure 9.1 below.

Figure 9.1: Cap and floor building blocks²⁴



²³ Ofgem - Interconnector Cap and Floor Regime Handbook - see Section 4.2 page 81, for context of Default being every 5 years or every year if a regime variation has been approved.

33

²⁴ Source: Ofgem - Cap and Floor Brochure



- 9.26 Considering the Ofgem model, they propose 4 revenue building blocks:
 - (i) Operating expenditure and decommissioning costs;
 - (ii) Depreciation on the regulatory asset value;
 - (iii) Return on the regulatory asset value; and
 - (iv) Corporation Tax
- 9.27 CRU also initially used the same four building blocks²⁵ but expanded these when establishing their process to cover:
 - (i) Revenue building blocks;
 - (ii) Performance building blocks;
 - (iii) Cost building blocks; and
 - (iv) Financial building blocks.
- 9.28 Subject to the needs case assessment, we intend to consider both the above approaches and develop an appropriate approach for Northern Ireland, should it be beneficial to do so.

Cap and Floor Financial Model and Uncertainty Mechanisms

- 9.29 An uncertainty mechanism is a process which allows for an adjustment to be made during the current period in which a regulated revenue regime has been set. Other regulators appear to have included the option for a 'one off' adjustment, either upwards or downwards, to be made in such situations.
- 9.30 UR are proposing, should there be a benefit in introducing a Cap and Floor regime, to establish a UR model for Northern Ireland which covers a portion²⁶ of the project's costs and revenues.
- 9.31 We consider it beneficial to run this in parallel with an Ofgem GB-only model which currently is expected to cover 50% of the project costs.

²⁵ <u>CRU - Decision Paper - Cap and Floor Regulatory Framework</u>

²⁶ At present Ofgem granted the LirlC project a cap and floor regime in principle, which is expected to cover 50% of the project costs. The apportionment of costs is to be considered as part of the analysis and assessment for the project in Northern Ireland.



- 9.32 Unexpected situations can occur in the operation of any regulated entity and as such we consider it would be reasonable to include an option for such a mechanism within a Cap and Floor regime.
- 9.33 As such we will seek stakeholder views on this concept as a mechanism within a potential framework for the regime for the LirlC project should the determination find a benefit for such a regime. Please note this is dependent on the outcome of the assessment and analysis as detailed within Section 6.

Apportionment of Cost

- 9.34 LirlC has been granted a Cap and Floor regime in principle for the GB side of their connection through Ofgem's window 3 IPA process decision.²⁷
- 9.35 This is expected to cover 50% of their costs, with the assumption that either the remaining 50% would be covered by an equivalent scheme in Northern Ireland, or by the interconnector developer themselves should a merchant model be more appropriate in the NI landscape. This is known as apportionment of cost, for a cross jurisdictional project, costs are typically separated between the jurisdictions through a negotiated agreement. The Ofgem Cap and Floor in principle awarded for the LirlC project presently would cover 50% of their costs.
- 9.36 Whilst Ofgem's default approach is to share costs equally, they may choose to adopt alternative arrangements in specific circumstances. This would depend on agreements reached between both regulators, in the two jurisdictions connected by the interconnector.
- 9.37 To note, Ofgem and the Commission de Régulation de l'Energie (CRE), the French regulator, published a joint statement²⁸ indicating that future discussions are to take place regarding the issue of cost and revenue sharing between the two countries with a view to publishing an updated joint statement on regulatory positions by the end of October 2025.
- 9.38 UR will continue to monitor the development between the two regulatory authorities in the context of cost sharing allocations, and we would intend to give full consideration whether or not a 50:50

²⁷ Ofgem - Decision on the Initial Project Assessment of the Third Cap and Floor Window for Electricity Interconnectors

²⁸ Ofgem - CRE Joint Statement



cost sharing allocation would be an appropriate level of apportionment for Northern Ireland consumers, dependent on the outcome of the assessment and analysis to be conducted.

Treatment of Inflation and Base Year

- 9.39 CPIH (Consumer Prices Index) will be used as the general measure of inflation, which is applied to inflate determined values from base year prices. We would intend to continue to use CPIH as the general measure of inflation for the analysis of costs for the parallel work in developing a regulated operating revenue regime framework, work which is dependent on the outcome of the needs case assessment.
- 9.40 We would intend to use the 2024/25 tariff year as the base year for the regime for the submission of regulatory data, dependent on the timing of the future submission.