RenewableNI

RenewableNI response to consultation on the Assessment on the Need for a Regulated Operating Revenue Regime for Future Interconnection (LirIC)

RenewableNI (RNI) is the voice for the renewable electricity industry in Northern Ireland. Through the development of policy, best practice, and public communications, we represent those engaged in wind, solar, and battery storage development. Our members make up the majority of the renewable industry supply chain in Northern Ireland.

We welcome the opportunity to respond to the Utility Regulator's (UR) consultation on the Assessment on the Need for a Regulated Operating Revenue Regime for Future Interconnection (LirIC).

RNI's detailed responses to each consultation question are set out below.

Response to consultation questions

Q1. Do respondents have any views regarding additional interconnection in Northern Ireland that you would like to highlight? If so, please provide details.

RNI believes that the UR is putting the cart before the horse by consulting on potential tariff arrangements for LirIC before establishing a clear policy or system-need case for further interconnection. The consultation itself acknowledges that "*there is no established policy in Northern Ireland on the need for further interconnection*" and that "*studies and research are needed to determine whether, and if so, how much additional interconnection may be required*". **It is essential that the starting point for any consideration of additional interconnection is clear, demonstrable consumer benefit as well as system need. Until that question is answered, it is premature to consider how a regulated revenue regime might operate or be funded.**

RNI is of the view that any assessment of additional interconnection should be grounded in an objective, evidence-based system-need case that is informed by SONI's system planning and the operational realities of the Northern Ireland network. Before any consideration is given to the design of a regulated operating revenue regime, a comprehensive cost-benefit analysis should also be undertaken to determine whether LirIC represents the best use of limited system and consumer resources. This analysis should assess the full range of economic, environmental and system impacts, including opportunity costs, and should benchmark LirIC against alternative measures such as transmission reinforcement and expansion, energy storage, demand-side flexibility and other system services that may deliver greater value to consumers and the local economy.

It is also important that the assessment of additional interconnection is consistent with the statutory framework established by the Climate Change Act (Northern Ireland) 2022[1]. The Act sets legally binding emissions and renewable electricity targets which, in practice, imply the

[1] Climate Change Act (Northern Ireland) 2022

need for an electricity system capable of integrating and utilising high levels of renewable generation. While the Act does not change the UR's core duties, it provides the wider legal and policy context in which those duties must now be exercised. Any evaluation of LirIC must therefore demonstrate that it would support, rather than constrain, the use of indigenous renewable generation and the long-term decarbonisation trajectory beyond 2030.

In addition, it is essential that the different assessment workstreams are sequenced correctly and not undertaken in isolation. The system impact assessment must be completed first and must explicitly inform any subsequent market modelling of socio-economic welfare impacts. Without this sequencing, there is a real risk that market modelling will significantly overestimate SEW benefits by assuming levels of power flow that cannot be delivered in practice due to system limitations or operational security requirements. This risk has already materialised in other jurisdictions, such as the CRU's assessment of MaresConnect, where conducting the assessments independently led to a material overestimation of SEW benefit. To avoid repeating this mistake, the system assessment for LirIC must precede and directly shape the market modelling phase.

We believe that Northern Ireland's immediate infrastructure priority should be domestic grid reinforcement, not additional interconnection. Without this, Northern Ireland will remain constrained in its ability to connect and make use of its own indigenous renewable generation, regardless of interconnector capacity.

It is also important to recognise that Northern Ireland is not currently in a position to compete on wholesale electricity price with GB. Until internal grid capacity is strengthened, the 80% renewable electricity target is achieved and sufficient storage is deployed, additional interconnection with GB would expose Northern Ireland to sustained imports rather than balanced flows. By contrast, greater interconnection with the Republic of Ireland would be more likely to produce balanced and mutually beneficial flows because wholesale prices and system characteristics are more closely aligned. Such interconnection would support renewable integration in both jurisdictions without undermining the investment case for new renewable capacity in Northern Ireland.

At present, Northern Ireland already experiences the highest levels of constraint and dispatch down anywhere in the UK and Ireland. Additional interconnection could exacerbate these issues by importing electricity into an already congested system rather than enabling renewable exports. The Moyle Interconnector has been a net importer into Northern Ireland in recent years and it is reasonable to expect that LirIC could operate in a similar manner. Increased imports under these conditions would likely require curtailment of indigenous renewable generation. **Given the scale of LirIC at 700 MW relative to the Northern Ireland system, any adverse impacts on constraint levels or dispatch down would be material rather than marginal.**

Recent operational data and high-level modelling undertaken for this consultation reinforce this concern. Controllable wind farms across Northern Ireland experienced average constraints of 27.3% in 2024. Wind farms located in the east of Northern Ireland recorded lower constraints of 23.9% because they are insulated from localised constraints in the west region and affected mainly by North-South system wide constraints, where sustained high imports on the Moyle Interconnector are a significant driver. Using 2024 operational profiles of demand, generation, Moyle flows and renewable availability, for this consultation response RNI, supported by analysis undertaken by MullanGrid, calculated North-South constraints of 23.6%, closely aligning with the observed 23.9% for wind farms in the east region[2].

Using the same methodology, MullanGrid modelled the impact of LirIC assuming it operated on a similar net-import basis to Moyle, which imported an average of approximately 280 MW in 2024. Given LirIC's higher capacity, the model assumed an average import flow of approximately 430 MW. **Under these conditions, North-South constraints for wind farms increased from 23.6% to 62.4%.** While this is a hypothetical application of 2024 conditions, it provides a credible indication of the potential scale of impact. More importantly, **this scenario could realistically materialise if LirIC were commissioned before delivery of the North South Interconnector and other essential grid reinforcements.** Given the historic delays to the North South Interconnector and the continuing slippage of major transmission projects into the 2030s in SONI's most recent draft Transmission Development Plan, it is not unreasonable to consider that these system conditions could coincide with the commissioning of LirIC[3].

This would further erode revenues for existing renewable projects, increase investment risk and send a negative signal to developers considering investment in Northern Ireland. The resulting impact on investor confidence could slow the delivery of new projects and undermine security of supply.

Beyond the physical system impacts noted above, there are also significant market design and policy discrepancies between the GB BETTA market and the I-SEM market that materially disadvantage renewable generators in Northern Ireland.

In the BETTA market, renewable units can bid into the balancing market at a price of their choice and, if dispatched down, are compensated at that bid price. This allows generators in GB to manage the commercial risk associated with dispatch down. In contrast, generators in I-SEM have no such ability to set their own dispatch down price, which means that increased levels of dispatch down represent a much higher and unmanageable risk to project revenues in Northern Ireland.

This disparity is compounded by the fact that interconnectors are non-synchronous and do not provide inertia, which is a key driver of curtailment in I-SEM. Under existing European rules, interconnector flows cannot be reduced until renewable generation has already been dispatched down as far as possible. As a result, additional interconnection capacity increases the volume of renewable generation that must be dispatched down in the I-SEM, while generators remain unable to mitigate the resulting revenue risk. This discrimination is intensified by the smaller size of the I-SEM market, which means that interconnector flows exert proportionately earlier and greater effects on renewable units compared to GB.

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[2] System Data Qtr Hourly 2024.xlsx

[3] Draft Transmission Development Plan 25-34.pdf

These issues are further exacerbated by the fact that the I-SEM to BETTA interconnectors are not scheduled using the EUPHEMIA algorithm, which means the market coupling process does not account for internal constraints on either side of the interconnector. This sub-optimal scheduling increases constraints affecting I-SEM units and leaves them unable to manage the risk. The current policy of constraining new renewable units before older units further magnifies these impacts and could make it extremely difficult, and potentially impossible, to develop new renewable generation in the I-SEM if further interconnection is approved before this discriminatory framework is addressed.

In addition to these market and investment impacts, higher levels of constraint and dispatch down also have direct consequences for consumers. Constraint costs are ultimately borne by consumers through system charges, and increased curtailment raises the overall cost of operating the electricity system. Any assessment of additional interconnection must therefore consider whether it would reduce or increase total system costs for consumers over the long term, rather than focusing narrowly on short-term wholesale price effects. This reinforces the need for a robust cost-benefit assessment before any decision on additional interconnection is taken.

Q2. Do respondents have any additional considerations they believe should be included within the step two workstream?

Yes. RNI believes the step two workstream must go beyond assessing the commercial viability of a regulated regime and fully evaluate the system and policy implications of additional interconnection for Northern Ireland.

In particular, the workstream should:

- **Model import and export scenarios,** including realistic assumptions about power flow direction. As evidenced by the operation of the Moyle Interconnector, additional interconnection may result in sustained net imports. The assessment must therefore consider the implications of increased imports into an already constrained system and the potential for higher levels of renewable dispatch down.

- **Quantify the impact on constraint and curtailment costs** for both existing and future renewable generators. These costs are already high in Northern Ireland and largely uncompensated due to an outdated firm access policy. Any assessment must consider whether additional interconnection would alleviate or worsen these impacts and the associated costs to consumers.

- **Assess investment impacts and consistency with wider statutory and system objectives,** including the effect that increased dispatch down and policy uncertainty would have on investor confidence and Northern Ireland's capacity to deliver new renewable electricity projects.

- Include a **transparent cost-benefit methodology**, published and open to consultation, setting out how consumer impacts and opportunity costs will be evaluated, including impacts on system charges, constraint costs and long-term bill stability.

- **Assess cross-jurisdictional cost and benefit allocation**, including how costs and benefits would be apportioned across jurisdictions and ensuring NI consumers are not exposed to costs without commensurate benefit.

Overall, RNI's view is that the step two workstream must start from a position of system need and demonstrable consumer value, not from the interests of an individual interconnector project. Without this clarity, there is a real risk of locking Northern Ireland into an interconnection model that worsens dispatch down, increases system costs and undermines the case for growing indigenous renewables.

Q3. Are respondents aware of any other interconnector revenue models outside of those listed above?

While RNI recognises that the Cap and Floor regime has been effective in Great Britain, its success is rooted in a fundamentally different system context. GB operates at a much larger scale and with significantly lower levels of internal transmission constraint than Northern Ireland, where congestion and dispatch down are already widespread.

RNI's position is that the choice of revenue model is secondary to the establishment of system need and consumer benefit. No revenue model can be considered appropriate until there is clear evidence that additional interconnection would reduce, rather than exacerbate, constraint, curtailment and overall system costs.

As set out in our response to Q1, the Moyle Interconnector has been a net importer into Northern Ireland in recent years and similar operational patterns could reasonably be expected for LirIC. In such circumstances, a regulated regime guaranteeing a minimum level of revenue would risk subsidising imports into a constrained system, increasing dispatch down of indigenous renewable generation and further undermining project revenues. This would weaken investor confidence and the business case for renewable development in Northern Ireland.

From a consumer perspective, such a regime would also risk transferring system and market risk from developers to consumers. Accordingly, we do not consider any regulated, semi-regulated or merchant interconnector revenue model to be appropriate unless and until a system-wide cost-benefit analysis demonstrates clear net benefit to consumers and alignment with renewable deployment objectives.

Q4. Do respondents agree with the criteria and principles to be applied during this assessment?

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Our responses to earlier questions set out our view that the assessment of additional interconnection and any associated regulated revenue regime is premature in the absence of a clear policy position and system-level cost-benefit analysis. However, if the Utility Regulator proceeds with this assessment, RenewableNI broadly agrees with the assessment criteria proposed, subject to the refinements outlined below.

In particular:

- **Market Modelling**: The modelling should include sensitivity analysis reflecting high-renewables system conditions, including reduced price volatility, lower arbitrage opportunities and scenarios where additional interconnection results in sustained net imports into Northern Ireland. **The modelling should explicitly test whether increased interconnection would increase or reduce overall system costs once constraint and dispatch-down impacts are included.**

  The market modelling assessment must not be carried out in isolation. It should be explicitly based on the findings of a prior system impact assessment that has objectively identified operational limitations and security constraints as well as realistic power flow conditions. Failure to sequence these assessments correctly would risk overstating SEW benefits by modelling flows that cannot be delivered in practice. The UR should require that market modelling is undertaken last and is explicitly constrained by the system impact findings.

- **System Impact:** The assessment must explicitly quantify the impact of additional interconnection on constraint volumes and renewable dispatch down, recognising that Northern Ireland already experiences high levels. **Scenarios should test whether additional interconnection capacity could exacerbate congestion and displace indigenous renewable generation rather than alleviate system pressures.**

- **Deliverability:** Deliverability should be assessed not only in terms of project maturity and financing, but also **policy coherence and opportunity cost,** including whether alternative investments would deliver greater and more durable benefits for consumers. This should include consideration of whether regulatory and system resources would be better directed toward domestic grid reinforcement, firm access reform and measures to reduce dispatch down.

RNI considers that strengthening the assessment criteria in this way is essential to ensure that any decision on additional interconnection or a regulated revenue regime is grounded in demonstrable system need, consumer benefit and alignment with Northern Ireland's renewable electricity objectives.

Q5. Do respondents support the proposed parallel work to be commenced in Q3 2026 regarding the development of a regulated operating revenue regime framework?

RNI does not support the proposed parallel work being progressed at this stage. Developing a regulated operating revenue regime framework in parallel with the needs assessment risks pre-empting the outcome of that assessment and conflicts with the principle of evidence-based sequencing.

The type of analysis RNI is calling for - namely a robust, system-wide cost-benefit assessment that establishes whether additional interconnection is required and delivers net benefit to Northern Ireland consumers - should be completed before any work begins on regime design. Advancing framework development in parallel risks embedding an implicit presumption in favour of a regulated regime before system need, consumer value and wider impacts, including constraint and dispatch-down effects, have been independently demonstrated.

There is also a risk that progressing this work could divert regulatory focus and resources away from more pressing system priorities that present a clear and immediate barrier to renewable deployment. These priorities, particularly domestic grid reinforcement and measures to reduce dispatch down, are also those most likely to deliver sustained consumer benefit through lower system costs and reduced exposure to volatile fossil fuel prices.

We believe that any work on a regulated operating revenue regime framework should be paused until the final determination on system need and cost-benefit has been reached. This would ensure that any subsequent regulatory development is justified, proportionate and firmly grounded in demonstrable consumer and system benefit.

RNI would also expect any subsequent assessment of need or revenue arrangements to be subject to full consultation with industry and consumer stakeholders.

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