



Response to Consultation by the Department of Environment, Climate and Communications

Electricity Interconnections Policy – Technical Consultation

Electricity Association of Ireland

Status: Consultation Response

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Electricity Association of Ireland

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The Electricity Association of Ireland (EAI) is the representative body for the electricity industry and gas retail sector operating within the Single Electricity Market (SEM) on the island of Ireland.

Our membership comprises utilities that represent 90% of generation and retail business activities and 100% of distribution within the market. Our members range in size from single plant operators and independent suppliers to international power utilities. Our members have a significant presence in Ireland, Northern Ireland and Great Britain across the sector value chain. We represent the interests of the all-island market in all relevant jurisdictions, including the EU via our membership of the European electricity representative body [Eurelectric](#).

We believe that electricity has a fundamental role in providing energy services in a decarbonised, sustainable future, in particular through the progressive electrification of transport and heating. We believe that this can be achieved, in the overall interest of society, through competitive markets that foster investment and innovation.

We promote this vision through constructive engagement with key policy, regulatory, technology and academic stakeholders both at domestic and EU levels.

Our ambition is to contribute to the realisation of a net-zero GHG emissions economy by 2050 or sooner, in order to limit the impact of rising temperatures. Electricity offers opportunities to decarbonise the Irish economy in a cost-effective manner.

Summary

EAI welcomes the opportunity to respond to this technical consultation on Ireland's Interconnection Policy.

Increased electricity interconnection is an important part of achieving a net zero energy system on this island. Existing assets and planned projects will see more than 2 GW of I-SEM interconnection in place by the end of the decade. Electricity interconnectors are capital intensive projects and do not operate in the traditional competitive market entry regime so it is important that new and existing investments are given the attention they require. This consultation response focusses on three specific aspects of interconnector development.

- Review of interconnectors investment within broader electricity system
- Reviewing costs and benefits and the investment model
- Treatment of hybrid interconnectors.

Consideration of the broader electricity system.

Current interconnection policy sees CRU assess each interconnector project on its own merits and considers the costs and benefits of the project at hand. This is an intuitive approach given that the project promoter needs certainty of the regime they are seeking to invest in. However, this approach may not achieve optimal results for customers as additional interconnector projects come forward.

EAI believes that the consideration of new interconnection projects should tie in with broader net zero energy system modelling for Ireland and ideally across the island. This is important because until now the imperative was to add renewables to the existing power system and interconnection played an important arbitrage role. In the future, Ireland, and Northern Ireland, needs to transition to a zero-carbon power system and so the dispatchable back-up generation needs to be decarbonised; this requires a whole of electricity system review. It is becoming more and more evident that interconnection's key attribute is arbitrage at time of low system stress, and it plays an important role here. However, electricity interconnectors have not provided security of electricity when needed at times of system stress.

Given this, the role of interconnection in the zero-carbon electricity system needs to be considered holistically and needs to be assessed against alternatives such as, for example, battery storage and zero carbon dispatchable generation located on the island.

Future interconnection policy also needs to take sector coupling into account. Unlocking the demand side is key in an electricity system with high levels of variable renewables and new loads from transport, heat and industry offer vast opportunities for flexible loads. Remuneration methodologies for new interconnectors can interact with the incentives for demand side participation such that exports might be incentivised over dispatchable loads on the island. This needs careful consideration to ensure unintended and non-intuitive incentives are not created.

Action 127 of the Climate Action Plan 2021 requires the carrying out power system modelling required to meet renewable energy and electricity emissions targets and analysis to underpin a Net Zero Roadmap. This work, overseen by CRU should inform future interconnection requirements.

Reviewing Costs and Benefits and the Investment Model

It is important that the costs and benefits of new interconnection projects are established, reviewed, and interrogated to achieve the best result for the electricity system. This should include impacts on all parts of the electricity sector including sector coupling interactions. The fully regulated model in particular, requires significant oversight of costs by the regulator given that most, if not all, of the risks associated with such projects fall on customers. We have already seen significant changes in assumptions on the Celtic Interconnector between initial consideration and approval which will place an additional and yet unquantified burden on customers. The cap and floor model sees a risk sharing approach between the project developer and the customer with the approach being widely adopted in GB. This regime also relies on a detailed review of expected costs and benefits by the CRU.

If new interconnection projects are more closely linked to broader electricity system planning, it might be possible to identify required interconnection projects and to run a competition to build it. This would require coordination with neighbouring markets and their regulators but ultimately could provide better value for money for customers.

Treatment of Hybrid Interconnectors

Given the scale of offshore wind development expected off Ireland's coast in the coming decades, it would appear prudent to consider hybrid interconnectors and the benefits they might bring. They may not add significant security of supply on the island but they could prove highly effective in matching renewables output and demand on a multi-market geographical basis.

At EU level, [ENTSOE](#) has already started to consider how it might consider candidate hybrid interconnector projects for inclusion in the TYNDP while [Ofgem](#) and [National Grid](#) in GB also recognises the potential role of such projects. There might well be multiple soft barriers to developing hybrid interconnectors, many of which might not be possible to envisage right now. For this reason, it would be appropriate to adopt a custom approach for initial projects. This might be as simple as stating that CRU will consider hybrid interconnector applications and that they will develop a methodology to deal with such applications and will consult on this, taking into account developments at EU and GB level. Such an approach was broadly adopted by CRU in its consideration of projects which came forward after the initial interconnection policy in 2018.

To the extent that hybrid interconnectors require legislation changes (such as the definition of an interconnector) this would need to be considered soon to give CRU a mandate to consider projects. This enabling action should proceed at the next available opportunity.

The Electricity Association of Ireland, 02 September 2022

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