Electricity Interconnection Policy Consultation
Department of the Environment, Climate and Communications (DECC)

Source Energie Submission

Introduction to Source Energie

Source Energie was founded to accelerate the roll-out of large-scale renewable energy projects as part of the energy transition to a sustainable future. The team behind Source Energie has led over 15GW of wind and solar photovoltaic (PV) projects globally including 5GW of offshore wind projects in UK and Irish waters.

Currently, Source Energie is developing a number of offshore projects in Irish waters with a view to seeking Maritime Area Consents (MACs) once the Maritime Area Regulatory Authority (MARA) is established in early 2023. The development of such projects is in clear alignment with the State's ambitious decarbonisation policy agenda as underlined in the Climate Action Plan 2021 and the Climate Action and Low Carbon Development (Amendment) Act 2021.

From a policy perspective, such development proposals are also, in alignment with the State's long-term energy and climate objectives including the objective of reaching net zero no later than 2050 and can similarly play a clear role in contributing to the State's goal of generating at least 5GW of offshore wind energy by 2030 as underlined in the Programme for Government (PFG). This overarching target is due to be updated to 7GW and 2GW of green hydrogen in light of the recently agreed sectoral emission ceilings.

Source Energie also recognises that there is also significant potential to produce green hydrogen from renewable electricity sources given Ireland's vast offshore wind energy potential and which is being actively considered in light of the current public consultation on developing a dedicated Hydrogen Strategy for Ireland.

In this regard, Source Energie is in the process of developing Project Dylan in the Celtic Sea Area of Interest (Wales Offshore Region) in collaboration with Environmental Resources Management (ERM). The ERM Dolphyn Process ('Deepwater Offshore Local Production of Hydrogen') will be deployed and involves a 300 MW floating offshore wind turbine concept for the production of green hydrogen and comprises a floating foundation, wind turbine and hydrogen production facility.

This proposal accords with the Welsh Government's commitment to net zero, the Smart Living Initiative and the Wales Hydrogen Pathway aimed at driving demand for green hydrogen production and inter-sectoral synergies as part of the transition to a more sustainable and climate resilient Welsh economy.

Source Energie Comments

Source Energie welcomes the opportunity to respond to this important public consultation aimed at updating the existing National Policy Statement on Electricity Interconnection 2018 as required by the Climate Action Plan 2021.

Since the publication of this Statement in 2018, there now exists a much-changed policy landscape and binding climate legislation in the form of the Climate Action and Low Carbon Development (Amendment) Act 2021. This legislation mandates an average 7% per annum reduction in overall greenhouse gas emissions from 2021 to 2030 (a 51% reduction over the decade), and to achieving net zero emissions by no later than 2050.

In addition, binding carbon budgets and sectoral emissions ceilings have been adopted by Government which set mandatory limits on each sector of the economy's emissions. The achievement of these challenging targets will require fundamental changes in all sectors of the economy and society. It is now accepted that these targets cannot be achieved without a rapid acceleration of the deployment of renewables and enabling technologies including interconnection, storage, and demand side response to manage oversupply of renewables.

The need for increased interconnection can also be seen in relation to the State's new offshore wind policy framework aimed at delivering 7 GW of installed offshore wind generation by 2030 including a long-term plan to take advantage of a potential of at least 30GW as per the Programme for Government commitments. In this context, it is submitted that an increase in interconnection would provide stimulus to Ireland's nascent offshore wind sector given the potential of offshore wind to significantly increase the renewable energy base in the State and to further diversify supply.

Moreover, and given Ireland's vast offshore wind resource, there exists significant potential to produce green hydrogen from renewable electricity whilst also providing an important opportunity for green transformation and deeper emission reduction. In terms of export, an increase in interconnection capacity and the coupling of green hydrogen with offshore wind energy could support significant revenue generating capability for Ireland if developed in conjunction with domestic production demand.

In this regard, the UK's Hydrogen Strategy lays down an intention to establish a Hydrogen Regulatory Framework for injection of blends into the gas transmission pipeline network from 2025. This may facilitate the import of hydrogen blends via existing Ireland-UK interconnection infrastructure. However, the requirements of the proposed regulation regarding the EU Hydrogen and Gas Markets Decarbonisation Package and relating to the certification of any such hydrogen and the jurisdiction to receive the relevant emission saving must be clarified to ensure alignment of policy ambitions in relation to same.

More generally, the flexibility that can be provided by increased interconnection to the electricity system is underlined in the statutory National Marine Planning Framework (NMPF). Such flexibility includes diversification of electricity generation technologies, enhancement of security of supply, and reduction in future costs associated with curtailment of intermittent renewables during periods when the supply exceeds domestic demand or the capacity of the onshore grid.

From an EU policy perspective, the Offshore Renewable Energy Strategy lays out the ambition of increasing pan-EU installed offshore wind capacity to 60 GW by 2030 and 300 GW by 2050. The Strategy also underscores the need for cross-border cooperation between EU member states in the deployment of offshore generation and offshore grid planning and development. The need for increased cross-border interconnection is further underlined in the REPowerEU Plan as is the need to accelerate the deployment of renewables through faster permitting processes and creation of 'go to' areas for the same.

As such, both national and EU policy are in alignment in terms of the flexibility that can be provided by interconnection in facilitating increased integration of variable renewables, augmenting wholesale market competition, and enhancing security of supply in the EU.

In this regard, the now urgent need to achieve energy self-sufficiency and to reduce reliance on imported fossil fuels has been thrown into stark relief in light of the ongoing war in Ukraine and associated global energy market disruption. More generally, the development of increased interconnection would provide significant inward investment in electricity infrastructure and more broadly, benefit to the wider digital economy.

In light of the above policy framework, the laying down of future minimum targets for interconnection should be considered given the contribution that increased interconnection can make to Ireland's post 2030 climate and energy targets and projected increases in domestic electricity demand whilst also contributing to security and diveristy of supply energy policy objectives.

To date, Irish interconnectors have been developed in the context of EU Project of Common Interest (PCI) recipient status pursuant to the EU Regulation for Trans-European energy infrastructure (TEN-E). This framework makes provision for streamlined planning and consenting procedures across the relevant European jurisdictions.

Regarding future interconnection projects and significant benefits that can be provided by the development of such infrastructure, Ireland's location on the northwest of Europe places an obvious limitation on options for interconnection.

As such, interconnection with the United Kingdom ('UK') provides the most cost competitive option for connection to European markets. However, the UK's departure from the EU in 2020 means that the UK constitutes a third country for the purposes of European energy law and policy. As such, clarity on the future relationship is needed as the UK is no longer included within the European Single Day Market Coupling. This has affected the ability of Irish energy infrastructure to qualify for PCI status.

While it is envisaged that the designation of priority project status for interconnection infrastructure between the UK and Ireland will be eligible to apply for priority status (known as Projects of Mutual Interest (PMI)) from 2023, clarification of the same by the EU-UK Specialised Committee established pursuant to the EU-UK Trade & Cooperation Agreement (TCA) which now governs energy relations between the UK and the EU is needed. Similarly, clarity on trade across interconnectors between the UK and the Single Electricity Market (SEM) is also required as the UK is no longer included in this market.

Finally, under the Climate Action Plan 2021, a commitment to explore further interconnection including dual purpose hybrid interconnection (combined cross-border transmission network with offshore renewable generation with two or more countries) was underlined. While currently, the deployment of hybrid interconnectors is not provided for by existing national and EU legislative and regulatory frameworks, such dual-purpose interconnectors have the potential to contribute to the achievement of post 2030 climate and energy ambitions whilst also playing a significant role towards the creation of a pan-European offshore meshed grid.

In light of such significant potential benefits, policy makers at national and EU levels should commence discussions on how best to develop the requisite regulatory frameworks to govern the development of such pan-European infrastructure in order that the same can be delivered in time to contribute to national and European climate and energy targets in the post 2030 context and to the enhancement of security and diversity of supply policy objectives.

Conclusion

Given the significant range of benefits that can be provided by increased interconnection capacity (including dual purpose hybrid interconnection) and clear alignment with a range of stated policy positions at EU and national level, the established of minimum targets for interconnection should be given due consideration.

This would ensure consistency of future interconnection development with the offshore wind plan-led enduring regime that will deliver post 2030 offshore objectives beyond the 7 GW target. This by proxy would also support carbon emission reduction commitments, increase Ireland's security of electricity supply through reducing reliance on imported fossil fuels, contribute to meeting expected increases in domestic electricity demand, and more broadly would provide significant economic benefits to the State.