

RenewableNI response to A Review of the Connections Policy Framework in Northern Ireland

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 a large majority of the renewable industry supply chain in Northern Ireland.

Policy Context

The UK Government has set in legislation a requirement for a 'net zero' economy by 2050. As the leader in decarbonisation, the power sector will have to achieve zero carbon first, with heat and transport expected to significantly electrify as the main way of cutting emissions. The International Energy Agency has stated that all advanced economies must achieve zero carbon power by 2035 and the UK Government has made a commitment to achieve this.

Working in conjunction with Wind Energy Ireland, RNI is committed to driving policy to deliver zero carbon power on the island of Ireland by 2035. This can only be achieved if the necessary level of renewable generation and the required zero carbon system services, are facilitated by the electricity network.

Shallow vs. Deep Connection Arrangements

RNI welcomes the publication of A Review of the Connections Policy Framework in Northern Ireland.

We are of the view that NI should move away from the current partially-deep connection arrangements, and move to a fully shallow arrangement. There are numerous reasons why this would be more beneficial for the NI system:

- As the Utility Regulator (UR) and Department for Economy's (DfE) own comparative analysis shows, both GB and ROI operate under shallow and shallow-ish arrangements respectively. To date, NI has been lagging behind its counterparts in ROI and GB when it comes to renewable energy policy. NI has been without a support scheme since the end of ROCS in 2017, leaving it at a competitive disadvantage. Connection costs exacerbate this disadvantage and as a result, only 70MW of new large-scale generation has connected this decade. NI's investment outlook has been poor and a lack of a support scheme along with significantly longer planning timelines than ROI and GB has meant that NI has not been an

attractive region for development. KPMG and RNI's Accelerating Renewables report further evidence this, with 82% of respondents stating that they do not view NI as an attractive location for renewables development.¹ Recently, we have seen ROI's firm access policy progress, while NI is not yet aligned. A move to a shallow connection policy would increase NI's competitiveness by reducing upfront costs. This would also reduce incidences of developers bearing the costs of a transmission upgrade that will eventually be shared with other projects. Adoption of a shallower distribution connection charging methodology in NI could be supported by learning and experienced gained in GB, who moved to a shallow charging approach on the 1st April 2023.

- We understand the UR's focus on the lowest cost for the consumer and the need to ensure a just transition. It is stated that if changes are implemented, currently connected customers, including domestic, would pay for a higher proportion of reinforcement costs via their electricity bills. However, high connection costs to the developer are already being passed on to the consumer whilst also acting as a barrier to increased renewables, which would lower consumer bills. Should this change with a move to a shallow connections arrangement, customers will see a larger portion of their bill on Use of system charges, however this does not mean that their overall bill will be more expensive. By lowering the barrier to connection to low carbon generators, the actual overall cost to the consumer should be lower. At present, networks and related costs account for around 24% of a consumer's bill, while wholesale costs account for the greater portion of a consumer's bill at 69%.² By moving to a more-shallow charging arrangement, this would in turn reduce wholesale costs.
- RenewableNI agrees with NIE Networks that a guiding principle of this call for evidence should include benefits to the green economy across the whole of NI as part of Stormont's Levelling Up³ and 10X economy⁴ strategies. As NI strives to decarbonise sectors such as heating and transport, it is essential that barriers such as high connection costs are removed and instead shared across the entire population. This could provide several additional benefits such as encouraging green growth and inward investment; creating employment in

¹ <https://renewableni.com/wp-content/uploads/2023/09/RNI-Report-Accelerating-renewables-in-Northern-Ireland-online-version.pdf>

² <https://www.uregni.gov.uk/bills-and-prices>

³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1095544/Executive_Summary.pdf

⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1095544/Executive_Summary.pdf

existing sectors as well as stimulating a new sustainable green economy across the whole of NI.

- RNI is working with Cornwall Insight to complete a study on factors that will affect bid prices in a future NI Renewable Electricity Support Scheme. As part of this study, Cornwall Insight will model the impact that reducing connection costs for developers will have. We are happy to share this analysis once it has been completed.
- NIE Networks have provided analysis on the effects of the potential impacts of energy affordability in NI if reinforcement costs were socialised further. NIE Networks had completed a piece of work with an external consultant to model the impact of socialised reinforcement costs on a customer bill if NI were to move to a shallower distribution charging regime, which included modelling new demand and generation connections out to 2030 using forecasts developed as part of their RP7 business plan. The results of this analysis showed that for an average domestic customer in NI, the socialisation of reinforcement costs under the previously GB charging methodology (shallowish) amounted to approximately £2 extra per annum in 2030 and under the current GB (shallow) charging methodology amounted to approximately £3 extra per customer per annum in 2030. This amounts to a percentage increase of less than 1% for both the previous GB charging (shallowish) methodology and the current GB (shallow) charging methodology.
- This will facilitate greater renewables penetration, increased electric vehicle usage and the installation of electric heat pumps. All are necessary for decarbonisation, which we are legally required to progress. Delay will only result in greater costs in the future, if steeper decarbonisation is required. The costs outlined by NIE Networks represent good value for the consumer.
- By not implementing socialisation of costs and shallow charging, this encourages more developers to go behind the meter/off grid, as this could be cheaper and potentially present more benefits to them. This then means that the costs to upgrade the grid would fall more heavily on remaining consumers, leading to higher bills. Socialisation of costs reflects that the infrastructure is for everyone, and as this would be spread out more, it would mean lower bills, and more developers encouraged to connect to the grid.

A 'do nothing' approach

It has been clearly outlined that this Call for Evidence is also considering a 'do nothing' approach and considers this option as having zero impact. This assumption is incorrect and should be considered and analysed in full if it is to be proposed as a legitimate option.

We have previously noted that NI is already a poor region for investment, and only 70MW of large-scale generation has connected this decade. A 'do nothing' approach would further solidify NI's position as a region with a very poor investment outlook and would ensure that future projects do not connect. This will in turn mean that we will not have enough capacity to reach the Climate Change Act requirements and means NI falls further behind ROI and GB.

Further, if a 'do nothing' approach is chosen, higher connection costs for the connecting customer will be reflected in higher bidding costs in markets to recover investment made by developers to connect the renewable generation. This in turn, will lead to electricity suppliers paying a higher price for electricity. These costs then need to be recovered by the suppliers and are eventually passed on to a customer's bill. The overall result of the "do nothing" approach is therefore an increase in customer bills.

Plan-led vs. developer-led approach

The call for evidence also raises the possibility of using a plan-led approach to grid development in the future. It is important that "plan-led" and "developer-led" are clearly defined in this context. RNI supports anticipatory investment and proactive grid build out, but to allow developers to decide on the most suitable sites to develop. To date, RNI has provided NIE Networks with our pipeline data each year, which has assisted in informing where clusters and other grid reinforcements are built. We would note that this combines elements of a plan-led approach and a developer-led approach. We would also note that opting for a "plan-led" approach does not mean that there should be no developer input, and vice versa.

Taking into account our pipeline data, the needs of the system and customers, and what is best for both potential projects and for stakeholders, we would suggest a resource-led approach. This would involve developers determining the siting of their projects based on the location of resources, including natural resources, and the SO's developing a plan informed by this, ahead of time. It is important to note that all technology types have different requirements in terms of where they should best be located, and these nuances could not be effectively captured with a 100% plan-led approach. The nature of a technology can be very specific and what is optimal for one may not be optimal for another. Planning policy will also play a role here and apply differently to different technologies.

We would be concerned that a move to a plan-led approach would result in significant resource constraints and uncertainty. Agreeing upon a suitable methodology to implement this could take a long time, and this could hinder progress in reaching 2030 targets. It is likely that this switch would

cause resourcing issues. This may require resources to be redirected from other roles requiring training and significant industry engagement, which would take time and again risk our ability in reaching 2030 targets. Should a plan-led approach be taken, it is crucial that there is sufficient consultation with industry as well as clarity and forward notice on whichever plan is being put forward.

Firm Access

Like private wires, firm access policy is also being progressed in ROI, with a detailed methodology consultation closing in August 2023. The consultation follows a SEM Committee decision paper in January 2023 on a Firm Access Methodology in Ireland (SEM-23-004). The decision also extends the new firm access methodology to connected legacy generation in ROI which currently does not have firm access, providing legacy generators with a path to becoming firm.

This is another area in which NI has no clearly defined policy and is lagging behind ROI with regards to speed of development. In addition, the recently published 2023/24 Approved Generator Use of System (GTUoS) Tariffs shows that NI tariff rates are now consistent with those in ROI. Should NI not have firm access or a shallow-er connections arrangement, this could disproportionately negatively affect NI.

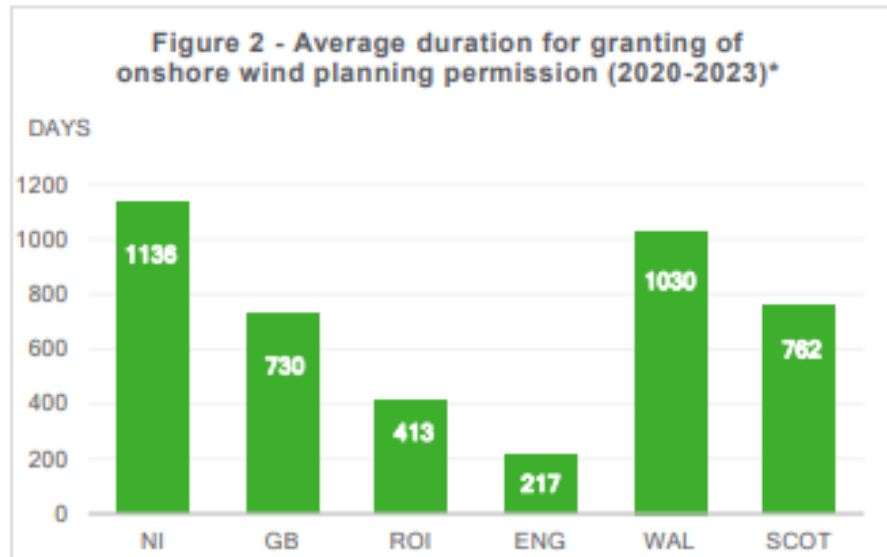
As NI is currently working on implementing a Renewable Electricity Support Scheme, projects will be at an additional risk should there be no firm access policy by the time this is implemented. Under RESS in ROI, firm units that have achieved an ex-ante market position will receive compensation for constraint at the level of financial support. Non-firm projects are currently not compensated as per the decision SEM-22-009. Should NI not implement a firm access policy, this leaves all projects that enter into the new NI Renewable Electricity Support Scheme at risk of significant lost revenue as a result of constraints. This additional risk would force developers to increase their bid prices to account for the uncertainty and cover potential losses. Therefore, having a firm access policy in place is directly relevant to the scope of this Call for Evidence, and would not only provide more certainty to renewable energy projects, but would also result in lower bid prices.

Connection Offer Timelines

- This call for evidence queries whether respondents would be supportive of having planning prior to a grid connection, as well as maintaining the current 3-month timeline to obtain a connection offer. With regards to the 3-month timeframe, we note that NIE Networks views

this as outdated and requiring a review due to the increasing complexity of connection applications. In order to make this process more efficient, a batch system could be considered. This could be more effective in enabling anticipatory investment, and could provide the SOs with a longer time to complete the offers. We would suggest consideration of a month-long window where developers could apply, with the SOs having a 6-month timeframe to complete the offers. We are happy to engage further on the practicalities of how this would work, however would point to ECP in ROI and the GB system as some examples as to how this could work. ECP has been very effective in clearing the grid connections queue in ROI, however the cap on offers has been ineffective. In GB, it is currently being proposed to not have a cap on the number of offers that can apply and be processed, which we would suggest considering for NI.

- We would advocate for a more efficient methodology of progressing through the planning system to reduce the current timelines. This may be done through a methodology by which projects could progress through the planning and grid processes concurrently, however this is something that would need to be consulted on further. As demonstrated in the chart below, planning timelines in NI are significantly longer than its counterparts, which, in its current state, makes reaching 80% renewables by 2030 unachievable.

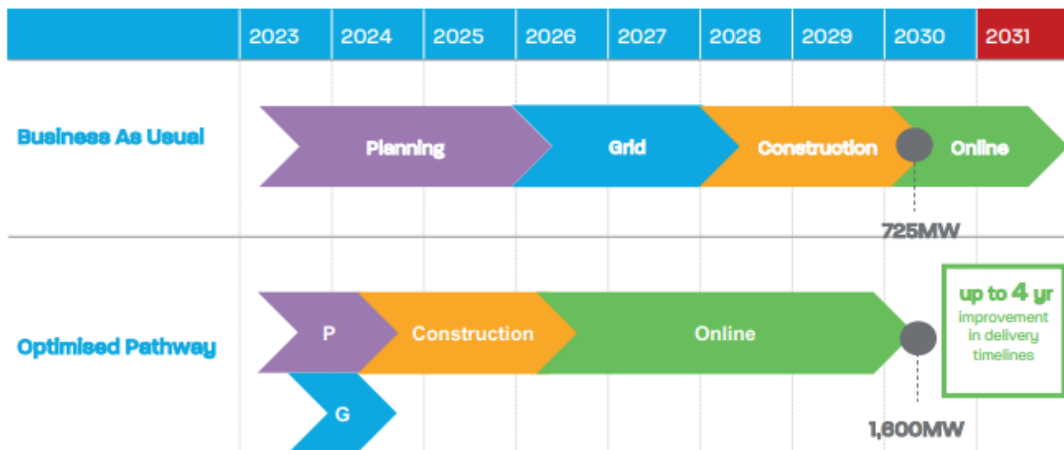


Source: [RenewableUK Energy Pulse & Wind Energy Ireland](#)

**Data shown for onshore wind projects with a capacity >1MW*

- We recognise the need to address speculative grid applications, which can create further bottlenecks and backlogs, and would welcome further consultation and collaboration on how to speed up timelines without creating a risk of capacity hoarding.
- The NI market has a known pipeline of 3,461MW of incremental renewables, from pre-planning to consented assets, which in theory could meet NI's required demand. However, by assuming current permitting and grid timelines, and applying realistic probability weightings, we believe a best-case outcome will see 725MW of this pipeline commence generation by 2030. This is less than 40% of the volume required to meet the 80% renewable electricity by 2030 requirement. Furthermore, given the current timelines to progress a project from ideation to operation in NI, unless a project is already within the pipeline, it is highly unlikely to be able to contribute to the 2030 target.

This is outlined in the “Business as Usual” scenario below.



If however we were to take the same pipeline of 3,461MW, but adopt and deliver upon the recommendations contained within the KPMG and RNI Accelerating Renewables report, it is estimated that the same pipeline could deliver 1,600MW of generation capacity by 2030. Furthermore, the enhanced timelines would provide an opportunity for further projects to be introduced into the system and still connect by 2030, providing a credible pathway to meeting 2030 targets. This is outlined in the “Optimised Pathway” scenario above. Further evidence to support these suggestions is included in the Accelerating Renewables report.⁵

We would also note that legislative change would likely be required to make any notable changes to how grid and planning are currently processed. Therefore, we would advise DfE and the UR to engage with stakeholders in advance, in order to be ready to implement positive change when an Executive is in place.

- A taskforce to accelerate renewable deployment is needed to ensure the 80% by 2030 renewables requirement is met. Similar to the Offshore Renewable Energy Action Plan (OREAP) Steering Group, bringing together key stakeholders and policy makers would result in a more coherent approach. The taskforce should be DfE led and include the Department

⁵ <https://renewableni.com/wp-content/uploads/2023/09/RNI-Report-Accelerating-renewables-in-Northern-Ireland-online-version.pdf>

for Infrastructure, UR, NIE Networks, SONI and industry. One likely outcome would be more certainty around grid connections and estimated planning completion dates, which would allow projects to provide more certainty, thus contributing to a more effective system.

Examples from other Jurisdictions

In June 2023, a number of independent recommendations were published from the UK's Electricity Networks Commissioner, Nick Winser, on how to accelerate the deployment of electricity transmission infrastructure.⁶

These recommendations cover every part of the process and can be regarded as an integrated programme of reform. The recommendations are supported in detail in the accompanying report from Energy Systems Catapult.⁷ While the NI system differs from GB, we would point to this report as an example of what NI should consider to improve connections arrangements in NI. Some of the recommendations that may be of particular relevance to this Call for Evidence are:

- All cost benefit analyses (CBA) that are carried out across the end-to-end process should be reviewed and updated to reflect whole project costs and wider societal benefits (e.g., constraint and carbon costs) where possible. This will create a more holistic view of the costs and benefits of projects to facilitate decision making. For example, an offline network build option may have a higher delivery cost but reduce constraint costs due to a shorter outage requirement. The CBA would show the higher delivery cost is offset by a lower constraint cost and provide net benefits from delivering sooner and connecting low carbon generation.
- A Government-led national information campaign should be started on the need for electricity infrastructure and how this can lead to good outcomes for people and the communities in which they live and work. This should include how this need can lead to job opportunities for them and their families. This campaign could be like that used by the UK armed forces. The advertising campaign should show why new electricity transmission infrastructure is required to connect renewable energy to where it is needed. The campaign should also highlight the range of different job opportunities available such as engineering,

⁶ <https://www.gov.uk/government/publications/accelerating-electricity-transmission-network-deployment-electricity-network-commissioners-recommendations>

⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1175647/electricity-networks-commissioner-companion-report.pdf

environmental science, planning and construction, amongst others. We believe this concept is also applicable to NI. While a focus must be placed on protecting the consumer, there should be a broader focus on the benefits that renewables can bring to communities in NI, and how further development will lead to lower costs to the consumer in the medium-long term. We would emphasise that the lowest cost to the consumer should encompass the medium to long term, as well as simply focusing on short term price reductions.

- We note that NIE Networks explored worked examples from ROI and GB in Appendix 1 of its response to this Call for Evidence. We would ask that the UR and DfE take this into account and ensure that NI is competitively aligned with its counterparts in ROI and GB.
- There are a number of international examples that could be considered with regards to queue management. National Grid ESO in GB are considering the inclusion of a queue management process within the CUSC. We would advise the UR and DfE to also consider implementing a queue management process in NI.

Clusters

When considering changes that should be made with regards to onshore connections, we would ask that the UR and DfE also review the current clusters policy. Clusters are currently rated at 90MW and are mostly for distribution connections only. In order to facilitate larger connections, we need a transmission cluster policy. This process of developing clusters is also not anticipatory enough. This needs to be amended to accommodate projects which are increasing in size as technology develops further.

It is also important that the charging policy for clusters at distribution level is reviewed and developed. The current charging policy only adequately covers the allocation of costs for the first 90MVA transformer. It does not properly consider the allocation of costs for the second transformer. It also does not properly consider the charging policy for transmission assets developed for the connection of the cluster. It is completely unsatisfactory that the first generator triggering the second transformer to pay fully for this asset. It is also unsatisfactory that generators that paid for connection assets to not be rebated when other generators benefit from connecting to these assets.

Some of difficulties in developing a robust and fair charging policy for clusters is due to the lack of rebate policy for connection assets. RenewableNI has requested for over ten years that rebate policy is introduced for distribution connected generators. There is currently rebating policy in place for transmission connected generators in Northern Ireland. It is discriminatory and unsustainable that substantially different approaches to charging apply to transmission and distribution connected generators.

At distribution voltages in GB there is a rebate methodology that is in place and is consistent across all DNO areas. The methodology is known as the '2nd comer rule' and ensures that the cost of common or shared assets is appropriately proportioned. This is typically where assets move from being 'sole use' to 'shared use', or where there is an increase in the number of connected parties making use of the same asset or assets. Essentially, the costs are apportioned on an aggregated basis according to the capacity of the asset versus the capacities of the connectees. The ability to receive a rebate lasts for 10 years from the date of connection.

Private Wires

At present, remote connection points (i.e. a connection point not located at a demand/generation location) will only be permitted for offshore connections. Private wires (cables/lines outside customers own site boundary) will only be permitted to interconnect a metered demand/generation site with a remote generator/demand (such as an 'auto-producer' type scenario). This is how private wires are currently considered by the SOs, however this policy is not clearly defined.

We note that a consultation on private wires has recently been launched in ROI, with a view to design and deliver a Private Wires policy which will be launched in 2024. We would urge the UR and DfE to also consider consulting on a Private Wires policy for NI.

Anticipatory Investment and Net Zero

It is crucial that further anticipatory investment is enabled to meet our 2030 targets. The anticipatory investment for cluster infrastructure, where the risk has been assessed and considered to be appropriate, has proven to be instrumental in connecting large amounts of renewable generation in order to achieve the 2020 RES-E targets. We believe the current clustering policy could benefit from more anticipatory investment, and given the long planning and lead times for large infrastructure projects at distribution and transmission, for connections and network reinforcement, the expansion of this anticipatory investment is required.

In order to facilitate this further anticipatory investment, the UR's mandate must be updated to include responsibilities and facilitation around net zero. The CRU in ROI notes their responsibilities as "Regulating energy and water for a changing climate." In order to not only ensure cohesion within the SEM, but to ensure that NI does not lag behind ROI in meeting its climate targets, it is vital that this dual role is recognized.

Other Considerations

We note that this call for evidence proposes for possible changes to apply to generation and/or demand. Could UR and DfE please clarify how energy storage would be classified in this regard? It is important that storage units are not also included under demand charges and face double charges or delays. We would endorse the Energy Storage Ireland response with regards to any aspects relating to energy storage.

We appreciate that this consultation relates to the onshore connections process only. However, we would note that our arguments with regards to the need for further anticipatory investment also apply to the offshore connections process. We have seen in RoI, a move towards a plan-led system after significant investment has been made, with a likely result that 2030 offshore targets will now be missed. To date the NI approach has seen all stakeholders step together, and we commend DfE's leadership on this. It is vital that this level of communication and collaboration continues.

Conclusion

RNI would like to thank UR and DfE for the opportunity to comment on A Review of the Connections Policy Framework in Northern Ireland.