



Call for Evidence - Electricity Connection Policy Framework Review

BH Estates are rural chartered surveyors specialising in country estate and land management. We offer management advice to help farms, property, estate or rural business achieve their objectives. We are trusted reliable experts in land and property who can provide support and expertise to those in rural and property interests.

We work with academic institutions and Government to support the research and knowledge of land use interventions and policy.

We farm land in Northern Ireland and we operate a renewable energy business in solar, wind and anaerobic digestion.

Questions posted in the call for evidence

1. What are the risks and opportunities in relation to the development of micro grids and what issues do these raise for the connections framework in NI?

Microgrids are smaller localised networks of renewable energy sources and selected customers, which supports accumulative small scale renewable energy generation in Northern Ireland. The development of microgrids therefore encourage smaller scale generation, favouring projects like roof mounted solar, turbines and AD.

The microgrid system can be seen as valuable to large energy users, with the land characteristics to generate electricity internally, like for example a school or university. The development of the microgrid system motivates an accumulation of multiple smaller generation projects or fewer larger scale projects.

Creating microgrids across the country has the potential to contribute significantly to decarbonisation goals, as collective contributions of smaller renewable projects will result in varying export levels to the grid.

A risk to microgrids could potentially be the lack of ability for potential producers to connect to the grid outside these networks. This may favour the high energy users – and may not take into account ideal locations for generation.

2. Do you agree with our guiding principles? Please expand your answer.

BH Estates agree with the guiding principles that are laid out in the call for evidence.

We agree with an encouragement of an efficient and effective connections framework accounting for the interests of consumers, as well as for the electricity decarbonisation goals Northern Ireland needs to achieve. We also see how important it is to review the current connection framework, as this is currently acting as a barrier to achieving a low carbon economy.

We believe that to facilitate the delivery of the Executive's Energy Strategy targets, the connections policy framework needs to include lower charging for distribution connection as well as support for small scale renewables.

3. Do you agree with our proposed scope in relation to this connection review?

this includes:

- **Are there other issues which you consider we should take into account. If so, please explain why**
- **Are there any connection areas we should remove from the scope of our review? If so, please explain why**

BH Estates welcomes the review, as it is crucial for the efficiency of future renewable energy generation in Northern Ireland. We agree it is critical that the review continues to understand what potential connection changes can be facilitated in the current legislation plus what new legislation would be needed to support a future efficient connection framework in Northern Ireland.

Currently the NI electricity network is built to facilitate the flow of electricity from large generators to households and businesses, however this needs to adapt to support and motivate small scale energy generation in NI. It is also clear that capacity needs to be developed in NI to facilitate the energy transition.

Another important area that needs to be in the scope of the review is smaller commercial customers or prosumers seeking network access to export renewable energy which they have generated into the network.

We believe that evaluating the concept of applying for planning permission alongside connection process is important within the review, as well as the ability to check grid capacity prior to connection and a reduction in connection costs.

4. Do you consider the current 'partially deep' connection boundary in NI appropriate? Please explain your rationale further and provide evidence

Looking at the current climate of small-scale grid connections in Northern Ireland, we do not consider the current system as appropriate to encouraging efficient future renewable electricity generation. The high cost for grid connection discourages landowners/potential producers to start generating electricity, which is negative from the point of view of decarbonisation targets and energy security. With the dominant rural characteristics of Northern Ireland, farms and rural landowners need to be encouraged to contribute to renewable energy production, either for their own use (prosumer) or for full export to the grid, either way decarbonising energy use.

We think that in some cases the costs associated with first time connection for generation and export is too high for small scale generation and often the potential producer will have additional reinforcement costs to pay directly. With the current commitment of NI to find an additional 40% of electricity, a shallower charging system would encourage renewable generation in rural settings.

5. Do you consider a shallow connection boundary to be appropriate in the NI context? Please explain your rationale further and provide evidence. If so, which of the following connection types should have a shallow connection boundary;

- a. **Demand only**
- b. **Generation only**
- c. **Demand and Generation**

d. An alternate connection type (for example Domestic/Non-Domestic connections)

Please explain your rationale further.

We consider a shallower connection boundary to be more appropriate for NI, as the current deeper system is acting as a deterrent for small scale projects with significant accumulative future generation potential. In this changed system, reinforcement charges would be less for new generators which appears to be a current avoidable cost in the existing system.

BH Estates believe that bringing the cost down for new generators makes sense in the context of renewable electricity commitments and energy security.

6. Do you consider a shallow-ish boundary to be appropriate in the NI context?

Please explain your rationale further and provide evidence. If so, which of the following connection types should have a shallow-ish connection boundary;

Demand only

Generation only

Demand and Generation (for example Domestic/Non-Domestic connections)

An alternate connection type

Please explain your rationale further.

BH Estates supports a system whereby the current grid connection/reinforcement costs are reduced for new small-scale generators. Under a shallow-ish boundary there is still high potential for new generators to have high connection/reinforcement costs, therefore we think a shallow boundary is more appropriate for the context of NI.

7. Do you believe that moving to a more shallow connection boundary in NI will deliver NI renewable targets that otherwise would not be met? Please provide evidence to demonstrate your answer.

The renewable electricity targets for 2030 set for Northern Ireland in the energy strategy will only be met through increased generation of renewable electricity, as demand is only going to increase. A more shallow connection boundary in Northern Ireland will reduce connection and reinforcement cost for the connectee, which we believe will increase the amount of new electricity generators as well as the development of current generation. Increasing connections for renewable generators is a positive step towards delivering the renewable targets.

Undoubtedly if connection costs decrease this will decrease the capacity of the grid for future connections, however if the cost was reduced for grid reinforcement, this would not negatively impact future energy generation as the grid could be reinforced at the pace of new connections. It is clear that with lower generation costs for rural landowners, a higher proportion of renewable electricity will come from small scale contributions, contributing to the achievement of the decarbonisation target.

8. Please provide evidence on the potential impacts on energy affordability in NI if reinforcement costs were socialised further? What would the impact on energy affordability be in NI if household bills were to increase per annum by;

• 1-3%

• 4-7%

- 7-10%
- > 10%

BH Estates are perhaps not best suited to comment on this section of the call for evidence however this would undoubtedly depend on the predicted costs of domestic electricity and a balance between affordability in a cost-of-living crisis versus the decarbonisation commitments of Northern Ireland.

However, in the long term, we believe that by increasing the amount of electricity generated from renewable sources the cost of energy will reduce for local consumers. Currently, much of the cost-of-living crises is as a result of energy price rises. Energy price rises are directly attributable to the cost of fossil fuel gas, which is used to generate a lot of our energy in Northern Ireland. However, if a much greater (and achievable) amount of electrical energy is generated in Northern Ireland then the price of electricity for consumers will not be subject to global market shocks.

9. Can NIE Networks differentiate between RP6 allowances, RP7 business plan connection requests and how these differentiate and have been factored into the analysis that has been done on potential reinforcement connection costs analysis NIE Networks have completed?

BH Estates are perhaps not best suited to comment on this section of the call for evidence however we can't see why NIE can't work through the different allowances and business plan requests to analysis potential reinforcement connection cost changes.

10. Do you think that a developer led or plan led is the best approach for the future development of connections in NI? Please explain your answer.

It is clear that a developer led approach has resulted in previous achievements of decarbonisation targets in Northern Ireland, however a hybrid approach moving into the future could have potential benefits to the whole system. A more plan led approach to connections would increase the certainty and predictability of the grid, which would help in forecasting Northern Ireland's trajectory of decarbonisation. This approach may bring with it more administration, but combined with a developer approach could have a place in future connection development.

11. Do you think the current 3-month timeframe for SONI and NIE Networks to issue a connection offer is appropriate? Please explain your answer.

We believe this current timeframe is impractical for developers, and should be reviewed. Connection applications are taking longer to complete in general (due to complexity), therefore we believe the whole process could be made more simple with shorter timeframes.

12. If our legislation facilitated it, should obtaining planning permission be a pre-requisite in order to receive a grid connection? Please explain your answer

This would be dependent on the commitment of the planning service to deliver renewable energy projects, as currently the wait time on planning would deter planning becoming a pre-requisite for connection. There would also need to be massive alignment between planning and NIE – to make sure money isn't wasted on planning – to then be told the grid capacity is full in the area etc.

On balance, we think a time limited grid connection would give developers some surety in order to move forward with a planning application which is likely to take longer and cost more.

13. If our legislation facilitated it, do respondents consider any other issues associated with the current queue process? Or that a different approach to managing the connection queue, would result in quicker connections? If so, what would that be? Are there any lessons to be learned from other jurisdictions?

A first come first served approach to the connection queue makes sense granted that a clear stepped system is followed whereby information is provided, beginning the application process, and application fees are paid at the same time in each application. (BH Estates are perhaps not best suited to comment on this section of the call for evidence due to lack of knowledge on the queued system)

14. Do you have any other information relevant to the subject matter of this Call for Evidence that you think we should consider?

See response to Q7

15. Please list any connection issues you have raised in order of priority. Please explain your reasoning behind your priority

- If Northern Ireland is to meet the electricity decarbonisation targets, the deterrents for generating renewable electricity like grid connection constraints, grid connection/reinforcement costs and relationship with planning need to be reviewed.
- The grid needs to be reinforced to increase grid capacity – as there are many areas in Northern Ireland with high potential to produce renewable electricity to low capacity of the grid for connection.
- We currently have many many farmers and rural business owners who are interested in small scale generation who are unable to achieve any meaningful connection to the grid or are put off by large connection fees. Across Northern Ireland these locations will need to be enabled to meet the targets the legislative assembly have set.