

NIRIG response to NIAUR Review of Electricity Distribution and Transmission Connections Policy Consultation

15 May 2017

The Northern Ireland Renewables Industry Group (NIRIG) represents the views of the renewable electricity industry in Northern Ireland, providing a conduit for knowledge exchange, policy development, support and consensus on best practice between all stakeholders. Committed to making a positive difference, we promote responsible development, support good community engagement and deliver low-cost electricity generation from sources such as onshore wind, tidal, solar and storage using our greatest natural resources.

NIRIG welcomes this Review of Electricity Distribution and Transmission Connections Policy. However, we have concerns about the limitations of the review, as many of the core issues require additional consideration from a network development and long-term energy strategy perspective. We are also concerned that the approach taken to connections is likely to negatively impact upon future consumers. Wind reduces electricity costs for consumers.¹ It is therefore imperative that further connection of renewables is enabled.

We urge that this consultation, the NIEN RP6 Final Determination, the forthcoming SONI Transmission Development Plan and the expected Department for the Economy Energy Strategy align to meet three key needs:

- **Further strengthening of current network to provide firm access for committed generation**
- **Growth of the electricity network to provide the framework for a modern economy and competitive electricity market**
- **An appropriate connection policy in the short-term as well as an enduring policy that facilitates connection of customers and sends the correct market signals**

¹ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2926875

Providing firm access for committed generation – delivering on obligations

It is impossible to discuss adequate connection policy without having regard to transmission reinforcements. There is a shortfall between committed renewables generation and the transmission reinforcements required to provide firm access. NIRIG strongly urges NIAUR to fulfil its requirement under SEM Generator Connection Policy Decision Paper AIP/SEM/114/06 to provide firm access to generators with connection agreements. This policy states that

“The Regulatory Authorities consider that firm access should be provided only from the actual completion date of deep reinforcements, but that the system operators and network owners should be obliged to complete such reinforcements in a timely manner.”

The 2010 Strategic Energy Framework clearly stated that approximately 1600MW of renewables generation would be required to achieve the target of 40% electricity from renewable sources. It acknowledged the need for grid development and investment in order to facilitate this government target.

The Medium Term Plan, which comprises a number of transmission development projects, was developed and approved in order to facilitate the connection of c1000MW of renewables generation. The need for transmission reinforcements in order to facilitate additional renewables generation was acknowledged by the Northern Ireland Executive in 2010:²

‘Extensive investment in electricity grid improvements must happen if Northern Ireland is to maximise its use of onshore and offshore renewable electricity resources. In addition, a robust and stable electricity transmission system is an essential pre-requisite for a competitive electricity market and is critical to a modern economy. We recognise that investment is needed in the short to medium term in order to deliver long term benefits, including net savings to consumers.’

It has also been recognised by NIE that:

‘Achieving the full 40% target will require substantial expansion of the 275kV transmission system and this is the focus of the Long Term Plan... The major element of the long term plan relates to the Renewable Integration Development Project (RIDP) - a joint collaboration between NIE, SONI and EirGrid which is work-in-progress’³

² <https://www.economy-ni.gov.uk/sites/default/files/publications/deti/sef%202010.pdf>

³ <http://www.nienetworks.co.uk/documents/Policy-Statements/P-110404-Final-Capital-InvestmentRequirements-Publ.aspx>

There is 1275MW of renewable generation connected to the grid in NI and a further 490 committed to connect. Of this, 173MW has been offered and connected through Phase 1 of the Alternative Connection Application and Offer Process. All of these projects must be given firm access.

The requirement for further reinforcements to deliver firm access to committed projects is an all-island policy, agreed by NIAUR in its role in the SEM Committee. It is also a requirement under EU directive 2009/28/EC, which requires member states to:

“take the appropriate steps to develop transmission and distribution grid infrastructure, in order to allow the secure operation of the electricity system as it accommodates the further development of electricity production from renewable sources.”

It is the purpose of the Renewables Grid Liaison Group:

To discuss and facilitate progress in the development of Northern Ireland’s electricity grid and renewable connections, in order to achieve the 40% renewable target.

The requirement for an adequate transmission and distribution grid infrastructure is acknowledged as a pre-requisite for a competitive electricity market and a modern economy by the NI Executive.

The requirement for system operators and network owners to provide firm access is a contractual agreement signed by generators when they accept connection offers. All of these committed generators have executed connection offers with NIE and where over 5MW applied and received TUoS offers from SONI. The connected generators have executed connection agreements with the System Operators.

NIRIG strongly recommends that as a basic first step in fulfilling its obligations that NIAUR commits to providing firm access for all committed renewables generation.

Growth of the electricity network - Building for the future

Planning for future generation connection is a requirement for a competitive electricity market. Onshore wind is the lowest cost form of generation. Given the decarbonisation agenda, increasing business demand for green energy and ongoing security of supply concerns, NIRIG members continue to develop renewable projects, notwithstanding the closure of the NIRO. The future network must enable this competition in the SEM and future I-SEM.

A coal-fired power station in NI will close in 2021, leading to generation deficit. New generation will therefore be required to address this deficit, and while the second North South Interconnector may play a role in addressing the deficit, policy must be flexible enough to respond to other contingencies. In the long-term it is anticipated that increased electricity usage (due to the electrification of heat and transport) will also lead to increased connection of renewables, storage and DSU.

Transmission costs account for approximately 10% of total electricity costs. Wholesale costs make up 60% of bills and wind energy is proved to lower these costs.⁴ Responsible planning must assess how to maximise the benefits of the cheapest form of electricity generation in order to protect future consumers.

Transmission planning is a vital element of connection policy and cannot be addressed in isolation from it. Without an adequate transmission network, connections cannot be effectively enabled. Achieving the NI 40% target will require substantial expansion of the 110kV transmission system, and a robust and future-proofed network for generators and consumers will also require substantial expansion of the transmission system.

NIRIG acknowledges the need for hurdles in order to prevent speculative grid connection applications. We agree that there must be commitment from connection offers to allow financing and certainty for future network development. The electricity market in Northern Ireland should not be closed to new generation. Allowing the refusal of connection offers based on a lack of capacity means a significant barrier to entry in the SEM. As the all-island market does not exclude new generation there should therefore be no barriers to market entry in Northern Ireland.

We acknowledge the NIAUR proposal to allow for transmission approvals on a project-by-project basis. NIRIG did not agree with this methodology when it was proposed in RP5. We do not agree now, and indeed the arguments against it have been strengthened by the absence of any significant transmission development in the interim.

We are concerned that in RP6 NIAUR has indicated a reduction in transmission investment of £9m per annum against RP5. Given that the industry's main concern is lack of investment in transmission planning, network growth and firm network capacity, NIRIG do not agree that a reduction in investment against RP5 is warranted. NIRIG is concerned that reference is made to future D5 projects but there is no indication of what these projects are, level of investment commitment or when the investment might be forthcoming.

⁴ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2926875

We reiterate the importance of the development of a transmission plan that facilitates a modern and competitive economy.

Connection offer process

NIRIG is of the opinion that the current connection offer impasse needs to be addressed and that an enduring solution to connection offers must also be found. This will require network development, as noted above, and a suitable connection policy.

A way forward on 'Phase 2' projects is needed urgently. NIRIG believes that planning permission is one clear and widely-acceptable criterion for allocation of connection offers and that in the interim this should be used, until a longer-term transmission policy is in place.

In the longer-term legislation is required to allow NIE and NIAUR to develop eligibility and criteria for connection application order. Legislation should not be used to introduce planning permission as a requirement: such policy should be developed by NIAUR, SONI and NIE. NIRIG believes that planning permission could be one of a number of specific milestones in the grid connection application process.

It is clear that the removal of planning permission led to a situation whereby there was very little barrier to grid connection applications, and the current connection moratorium reflects the resultant difficulties. NIRIG believes that there must be a greater hurdle to grid connection application than a £40,000 cheque in the case of large-scale projects. In the long-term, planning permission may be used as one of a number of milestones that prevents speculative grid hoarding and allows for the development of realistic projects.

Specific comments on the issues in the Review are below

Connections network management

Utilising network capacity

1.16 Using current network capacity more efficiently could remove the need for reinforcement.

Efficient use of current network will neither be sufficient for new generation nor provide firm access for existing generation. Projects with connection agreements require firm access as per SEM Generator Connection Policy Decision Paper AIP/SEM/114/06:

“The Regulatory Authorities consider that firm access should be provided only from the actual completion date of deep reinforcements, but that the system operators and network owners should be obliged to complete such reinforcements in a timely manner.”

Generation, demand, storage and DSR projects will continue to develop in NI and the network must be developed to enable this and facilitate competition in the SEM and future I-SEM.

There is an urgent need for a comprehensive plan for network reinforcement and SONI, NIAUR, NIE and the Department for the Economy must address this need through an appropriate NIEN RP6 Price Control, SONI Transmission Development Plan and a new Energy Strategy.

1.19 Innovation has an important role to play

As part of the innovation review we request the consideration of maximisation of existing assets. This could include, for example, a built rating review, where multiple margins of safety are removed and topography and wind cooling built into ratings assigned to assets to release pre-existing grid capacity that is currently not being utilised.

1.20 An allowance of £7.6 million to invest for the future in RP6.

This is unlikely to address the SEMC requirement to provide firm access to committed generation or connection for future generation. Please see our comments above.

Recovering network capacity

1.25 There is some under-utilisation of capacity and NIE should look at options to release consistently under-utilised capacity.

NIRIG welcomes this proposal.

Building more network capacity

1.15 Building reinforcement to increase capacity may be inefficient and could lead to investment in capacity which may not be required.

This approach does not enable efficient or appropriate planning. It is unlikely to address the SEMC requirement to provide firm access. NIRIG strongly disagrees with this approach to network planning as short-term and unlikely to protect future consumers.

1.29 Will engage with SONI on releasing further transparency in relation to proposed network investment.

It is unacceptable that there is no long-term transmission plan in place or under development. SONI must produce a transmission plan as quickly as possible and NIAUR and the DfE must support this through the development of an energy strategy and a clear signal

that future consumers will be protected through encouraging long-term planning. We note that from a commercial perspective plant will not be built if there are no transmission investment signals.

Connections charging framework

1.32 No plan for further review of the connections charging structure to make it deeper.

NIRIG urges consideration of deep charging for distribution assets. This could potentially allow additional SSG to connect.

1.35 Agree with principle of rebates and will seek to do so again with Department in parallel with this consultation

Rebating is currently a lottery for developers as SONI has the ability to enable rebates between transmission connections, whereas there is no mechanism for TSO customers to receive rebates from DSO connections and vice versa. We urge the DfE and NIAUR to work closely to resolve this unfair treatment as soon as practically possible.

Connections process and queue

Planning permission

1.44 Open to engaging with the Department should there be a rationale to introduce legislation for planning permission

NIRIG does not believe that the Department should introduce legislation for planning permission. Instead, the Department should introduce legislation allowing NIE and NIAUR to decide the most appropriate connection policy, which may include planning permission as a requirement or milestone.

1.46 NIE/SONI could use Planning Permission as a factor in determining terms and conditions of connection offers i.e. use it as a requirement within the regulatory framework

In the short-term i.e. for Phase 2 projects NIRIG believes that planning permission should be a requirement for grid connection offers, in order to expedite the current impasse for these projects.

In the longer-term an enduring process is required, which, as noted above, may require legislation.

This enduring process will need to set certain hurdles or milestones in order to avoid speculative grid applications and the potential for hoarding. One such hurdle could be the requirement for planning permission. In ROI this approach is being considered: the previous system of grid connection application before planning permission led to serious delays in viable projects as grid capacity was limited.

Prioritisation of connections

1.48 Certain technologies, such as storage, may be connected before others, if it can be demonstrated that it would not be to the detriment of other applicants.

NIRIG urges that DS3 projects which support increased renewables generation are prioritised. We are unable to comment further on prioritisation of connections without seeing detailed proposals and criteria for such prioritisation.

1.51 Next step is for NIEN and SONI to ensure a robust process is in place for considering new applications beyond Phase 1

We note that existing applications should not be considered 'new'. NIRIG welcomes a robust process but a timeline is vital, given that this delay is now approaching 2 years.

SONI Offer timelines

1.57 Could assess licence mods to allow SONI more time to make connection offers for 'complex offers'

With an appropriate queue and robust connection offer process there should not be a need for additional time to respond to offers. We believe that clear criteria should have to be applied for any extension and this should be the exception, rather than the rule, with SONI needing to apply for any extension from NIAUR.

Customer service, engagement and transparency

Pricing transparency

1.65 A Quotation Accuracy Scheme could allow for more accurate and comparable connection offers.

NIRIG agrees strongly and welcomes this proposal.

Network and generator information

1.68 Better information could provide clearer signals to those who wish to connect.

NIRIG agrees with the proposed next steps.

Extension and connection offer requirements

Criteria and requirements for considering and requesting extensions

2.12/2.13 Granting requests for extensions should be the exception rather than the norm. There has been limited transparency or accountability to date in how extensions are requested and granted

NIRIG agrees.

2.20 A four-step process has been proposed

This appears to be a cumbersome, slow and bureaucratic process. We are concerned that this will slow down the application process even further.

Initial considerations on refusal to provide a connection offer

2.33-2.39

NIRIG registers our extreme concerns at the proposals to facilitate the refusing of connection offers. Put simply, without a transmission plan in place, the ability to refuse connection offers is likely to lead to a vicious circle whereby NIE refuses connection offers because they are unable to invest in deep reinforcements, and therefore reduce the business case to invest in network reinforcement.

As a very basic illustration:

- January 2018 –
 - Developer 1 requests a connection for a 45MW wind project in [x]. NIEN refuses on the basis that they are unable to invest in deep reinforcements on a 'project by project' D5 mechanism basis.
- May 2018 –
 - Developer 2 requests a connection for a 10MW solar project 2 miles from [x]. NIEN refuses on the basis that they are unable to invest in deep reinforcements on a 'project by project' D5 mechanism basis.
- September 2018 –
 - Developer 3 requests a connection for a 20MW storage project located 15 miles from [x]. NIEN refuses on the basis that they are unable to invest in deep reinforcements on a 'project by project' D5 mechanism basis.
- January 2019 –
 - An animal feed firm requests a connection for a new 25MW factory 3 miles from [x].
- July 2019 –
 - NIEN requests funding under the D5 mechanism to develop a 110kV transmission project to [x]. NIAUR refuses on the basis that there is no confirmed need for the project.

Result – 75MW of viable generation and storage disappears, with resultant loss of investment and efficient functioning of the market, reduced benefits from wind in the SEM and an absence of investment from energy-intensive industries.

While simplistic, this scenario outlines the potential risks of allowing NIE and SONI to refuse a connection offer. NIRIG strongly disagrees with this proposal. We instead urge that a clear and comprehensive transmission development plan be put in place to allow connection of viable generation, load, DSR and storage projects as soon as possible.

Meabh Cormacain

NIRIG