

NIRIG response to NIAUR consultation on SONI Draft Transmission Development Plan Northern Ireland 2018-2027

24 May 2019

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 from onshore wind, tidal, solar and storage using our greatest natural resources.

We welcome the opportunity to respond to this consultation.

EU Exit

Given the timing of this draft Plan we welcome the aim to maintain a strong relationship between Northern Ireland, Great Britain and Ireland on energy matters. As noted, the development of the Northern Ireland electricity sector is guided by both national and European Union (EU) rules and strategic objectives. We fully support coordination on energy matters and believe that effective functioning of the SEM post-Brexit will require formal structures to enable policy coherence and avoid a two-speed market which could impact security of supply, economic competitiveness and long-term sustainability.

Connecting existing and future renewable generation

Much of the transmission plan resembles a maintenance plan with an emphasis on transformer replacement, line replacement, protection schemes and cooler replacement. We do not believe that the TDP draft fully recognises the reinforcement investment required for existing connected generation, nor does it adequately provide for the increased levels of renewable generation that will be required to deliver decarbonisation targets.

For example, a moderately-ambitious target of 70% renewable electricity by 2030 would require an extra c1000MW of onshore wind and 200MW of solar generation, and the draft Plan does not provide the investment required for this level of generation. In addition, existing projects will be repowered, potentially with greater MW capacity, within the

timeframe of this draft Plan. **The TDP does not reflect the requirement for increased capacity and connections.**

Dispatch down of wind farms in NI was 9% in 2018, demonstrating that the absence of ATRs is already impacting wind farm output. The draft TDP does not make sufficient reference to the impacts of the proposed ATRs on making existing generation firm, and we recommend that the ATRs refer to how much generation could be relieved of constraints. We are also very concerned about the delays to required ATRs, and regular push-back of estimated completion dates.

We would appreciate if the Plan could include a review of all clusters even if there are no reinforcements planned.

Interconnection

We understand the challenges in bringing forward the second North-South interconnector, the completion dates for which have been pushed back from 2017 to 2023. Given these challenges, we believe that SONI should be continuously planning for alternatives should the N-S I/C not be developed as this is impacting a very significant quantity of existing generation. We would like to see these contingency plans included in the final version of the Plan.

We understand that SONI/EirGrid plan to contract more capacity exporting from Moyle (NI-Scotland) from 2020 onwards. We further understand that there is currently an export restriction in place due to voltage issues and that SONI is preparing to remove this 300MW export restriction. We request clarity on the works and timelines required to maximise export capacity through the Moyle Interconnector.

Coordination

We recommend an additional focus on coordination between NIEN and SONI to deliver the best outcome for the system as a whole. This includes coordinated planning and operational processes, data management, and transparency, to enable efficient system decisions i.e. whether an investment at a transmission or a distribution level is in the best interests of consumers. A Joint Planning Committee with the SO and TO, such as exists in GB, could facilitate this liaison.

Furthermore, we believe that coordination of network planning must take into account the all-island nature of the electricity market, and in particular the importance of circuits to the West and into Donegal. The PCI-funded Renewable Integration Development Project (RIDP) is an example of coordination, EU Exit and future renewables generation are all aligned.

We would also welcome more progress on the Flexible Connections along with the Hybrid Sites Working Group. This progress should feed directly into the long term development plan

options allowing for alternatives, such as connect and manage, to connect as soon as possible.

Specific comments on the TDP draft are as follows:

1.7 Changes Since the Freeze Date

Prioritisation and timelines

There is a list of dates of ECD of projects as of the freeze date of 1 January 2017. Many of these represent significant delays to original ECDs. It would be useful, in the interests of transparency, to include original ECD dates for all projects.

We are concerned that since the data freeze date of 1 January 2018 11 project timetables changes have been made, delaying a number of projects even further. These include

- Coolkeeragh-Magherafelt 275kV Asset Replacement impacting >115 MW of wind
- New 400kV N-S tieline

Wind farms are already seeing increased constraints of up to 3.5% as a direct result of the absence of these projects. We recommend an approach whereby timeframe commitments are more rigorously adhered to, in order to provide confidence to consumers, customers and stakeholders. This may also be helped by clarification of the NIE-SONI TIA and development of specific protocols concerning issues such as Connection Applications and Investment Planning.

We note the absence of concrete information about dates or plans for completion of projects. This is worrying given the delays already experienced to ATRs required to make existing projects firm. We would appreciate both timelines and a clear prioritisation process in the final plan.

3.1 Scenario Planning

We recognise the challenges of planning in a context with limited energy policy. However, we note that UK and EU have set ambitious energy decarbonisation targets and these reflect the global importance of clean energy and a transition towards a more complex, flexible energy system. In order to fulfil the requirements of the European Clean Energy Package, UK greenhouse gas reduction targets and/or the COP21 Paris Agreement we require significant growth in renewable electricity generation.

NI is required to reduce greenhouse emissions by at least 35% against 1990 levels by 2030 and existing policies are not enough to deliver this. The Committee for Climate Change explicitly refers to a route to market for low-carbon generation in NI. We therefore expect that a 70% target of RES-E, in line with similar targets in Wales and Ireland is a reasonable projection.

We note that there is more than 350MW of >2MW onshore wind projects with planning consent in NI and >50MW of repowered projects. We further note that the first NI onshore wind farm without subsidy will shortly be taken forward to development.

Scenario planning that does not plan for significant growth in renewable electricity is therefore unlikely to be adequate and could lead to increases in costs to the consumer, higher levels of dispatch down, uncertainty around the commercial viability of new and existing renewables connections, enduring difficulties in existing network and operations and challenges in maintaining an integrated all-island market.

We recommend rapid progress towards the development of Future Energy Scenarios, as these will inform both the forthcoming NI energy strategy and the TDP. Long-term policy certainty is needed to enable a clear, consistent long-term energy and decarbonisation strategy for Northern Ireland to 2030 and beyond.

3.3 Roles and Responsibilities

We recommend an additional focus on coordination. NIEN and SONI must work together much more to deliver the best outcome for the system as a whole. This includes coordinated planning and operational processes, data management, and transparency, to enable efficient system decisions i.e. whether an investment at a transmission or a distribution level is in the best interests of consumers.

As noted above (1.7) there are considerable delays in the development of important projects. We understand that some delays are outside of the control of SONI, but we believe that better coordination could help address some delays. We recommend reviewing System Operator/Transmission Operator Codes in GB to assess whether these would be appropriate and beneficial for NIEN/SONI adoption:

<https://www.nationalgrideso.com/codes/system-operator-transmission-owner-code?code-documents>

4.2 Our Approach to Technology

The use of new technologies can bring advantages including enhanced operational performance, improved system reliability, shortened construction times and reduced impact on the environment. All of these have the potential to reduce system costs. We encourage

development of a post-DS3 programme to enable higher SNSP. We also recommend greater emphasis on innovation to enable SONI to continue deliver world-leading levels of renewable penetration.

5.1.3 Renewable Energy Sources Integration

We do not believe that the TDP draft recognises the reinforcement investment required for existing non-firm connected generation, nor does it adequately provide for the increased levels of renewable generation that will be required to deliver decarbonisation targets.

For example, a moderately-ambitious target of 70% renewable electricity by 2030 would require an extra c1000MW of onshore wind and 200MW of solar generation, and the draft Plan does not provide the investment required for this level of generation. Instead, much of the transmission plan resembles a maintenance plan with an emphasis on transformer replacement, line replacement, protection schemes and cooler replacement.

We do not believe that there is sufficient information in this TDP about the quantity of existing non-firm connections and the quantity, location and timelines for delivery of these projects. We are also very concerned about the delays to required ATRs, and regular push-back of estimated completion dates.

In order to fulfil both European and local renewable targets, many new RES projects are expected to be initiated throughout the period of this TDP. We do not believe that this plan adequately presents a long-term network development plan for the connection of the new low-carbon generation that will be required to meet national and international targets.

The draft TDP refers to the Generation Capacity Statement published last year, which shows no increase in installed wind after 2020, and also refers to the All-Island Ten-Year Transmission Forecast Statement 2017 which states that there is little opportunity for new generation in the north west. We do not believe that either scenario is correct. A number of projects representing new wind, as well as storage and tidal projects have planning permission and/or grid connections, and our decarbonisation targets will require a significant growth in renewable generation. West of Omagh alone, there are 100MW of shovel-ready wind energy projects.

In addition, existing projects will be repowered, potentially with greater MW capacity, within the timeframe of this draft Plan. **The TDP does not reflect the requirement for increased capacity and connections.**

Existing generation

Constraints for connected wind farms rose in Q3 2018, demonstrating that the absence of ATRs is already impacting wind farm output. The draft TDP does not make sufficient

reference to the impacts of the proposed ATRs on making existing generation firm, and we recommend that the ATRs refer to how much generation could be relieved of constraints. For example:

- The Coolkeeragh-Magherafelt 275kV Asset Replacement (delayed), which impacts >115MW of generation
- New Kells-Rasharkin 110kV circuit impacting c160MW existing generation

We are also concerned about the delays to required ATRs, and regular push-back of estimated completion dates.

For example:

- Proposed Omagh South–Turleenan 275kV circuit: Estimated completion was 2020 in Nov 2013, pushed back 4 years in a connection offer dated 16 months later
- Coleraine-Kells 110kV circuit upgrade: Estimated completion date of 2014 in Nov 2013, 24 months later the date had been pushed back by >2 years

We would appreciate if the Plan could to include a review of all clusters even if there are no reinforcements planned.

Economics and cost

Extension and reinforcement of the network will contribute to economic development, by enabling not only renewables investment but also demand connections in rural areas. As wind energy currently contributes more than £10m annually in business rates alone to local Councils, the economic benefits of investment in a more robust network need to be made clear.

We further note the benefits of properly planned renewable integration projects such as RIDP. This project would address all expected adequacy issues in the medium to long term in the Northwest of the island to permit the contracted level of renewable energy to connect in the northwest. It would further provide an increase in adequacy far greater than this, facilitating the connection of significantly more generation and enabling greater user of low-cost energy sources.

We welcome the recognition that renewable energy is an integral part of Northern Ireland's sustainable energy objectives and climate change strategy, contributing to energy security and the reduction of greenhouse gas emissions. Established technologies, including onshore wind, are also the cheapest form of new electricity generation and hence do not just address cost-competitiveness when fossil fuels prices are volatile, but are the lowest-cost option for new electricity.

We look forward to further engagement on the draft Transmission Development Plan, the future energy scenarios study and the operational issues that will continue to facilitate clean growth in Northern Ireland.

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