Response by Energia to NIAUR Consultation on

SONI's Draft Transmission Development Plan Northern Ireland

02 August 2024

1 Introduction

We welcome the publication of the draft TDPNI and ask for continued engagement with industry. Energia previously responded to SONI's consultation on the Draft TDPNI 2023-2032 at the end of last year. Energia's response highlighted that in spite of Northern Ireland's positive track record of delivering renewables targets, grid related issues are at risk of undermining new renewable investment and it is therefore of crucial importance that grid development keeps pace with renewables deployment if NI is to successfully achieve the required transition to renewable energy on time and at least cost.

An additional point Energia raised in its prior response to SONI's consultation on this TDPNI, is the importance of recognising that NI is reliant on global investment and is relatively late to the table with regards to introducing policies to attract new capital. Any risk factor associated with investments in NI, imposes an enduring cost on the end consumer and thus NI must embrace policies that improve its attractiveness to developers.

In that vein NI's recent track record is cause for concern. Only 70MW of large-scale renewables has been developed in NI in the past four years at a time when at least 400MW per year needs to be delivered each year until 2030, in order to achieve the government's legislated 2030 targets. The fact that in one year (2016) NI successfully developed 400MW of capacity does however demonstrate that with the right policies in place, NI is capable of delivering the capacity needed at the speed necessary to achieve its climate goals.

2 Executive Summary

The level of dispatch down that onshore wind renewable units are subject to in Northern Ireland, particularly in relation to constraints, is at risk of undermining existing renewable investments and dissuading new ones. As the Utility Regulator will be aware the DfE are in the process of designing a new renewable electricity support scheme for Northern Ireland. To operate efficiently and effectively the new support scheme must deliver the requisite capacity at the lowest price to the end consumer. This implies that the scheme must insulate project developers from risks beyond their control, whilst retaining locational signals to prevent adverse selection (i.e. projects developed in areas of the grid already subject to high levels of constraint).

- Constraint levels are so high across all of Northern Ireland at the moment however that it undermines much of the benefit of developing projects in good locations versus bad locations. It's imperative therefore that a sizeable uptick in the delivery of grid capacity occurs in the coming years, to not only promote efficient project delivery in the future, but also maximise the output of existing sites (thus reducing the amount of new capacity that customers are required to fund).
- Energia therefore welcomed the October 2023 update provided by SONI and EirGrid regarding the intention to commence development of the North South interconnector[1]. This single piece of infrastructure will mitigate much of the

[1] North-South 400 kV Interconnection Project October 2023 (Link)

constraint levels that renewables in NI are subject to, particularly when the Moyle interconnector is importing as has been witnessed recently.

- All efforts must be undertaken to alleviate the seriously high level of network constraints, compounded by north south tie line restrictions and high levels of interconnector imports, in Northern Ireland that limit the running hours of renewable units if NI is to achieve it's 2030 targets. In addition to the major reinforcement works outlined in the TYDNP, it is vital that the existing network infrastructure can be leveraged to the greatest extent possible.
    - Efforts must therefore be expedited as a matter of urgency to facilitate hybrid connections, strategically located storage, and the co-location of renewable units with storage or other technologies that can absorb surplus electricity, such as hydrogen electrolysers.
    - It's likewise important that the requisite market systems are put in place as soon as possible to remove existing barriers to such connections.
- Energia notes that the TES model 'Accelerated Model' scenario is being used to inform future needs from a grid development standpoint. Planning the grid based on scenarios in TES which are very unlikely to occur, based on the current trajectory, runs the risk of diverting grid resources and schedules from projects which are substantially more feasible in the near-term (solar, onshore etc.) in favour of offshore projects that have a high risk of delay, and in some cases no contracted route to market.
- Energia note that expected delivery date of a number of large transmission projects has been pushed outwards in a recent update provided to industry. In many cases these projects have incurred at least one subsequent delay up until this point. While it's increasingly imperative that SONI are provided with the resources to deliver these projects on time, repeated delays of key infrastructure cannot become the norm.
    - Where it is unlikely that a project will likely face challenges obtaining planning permission, alternative routes and designs must be in place to provide contingency. Strict adherence to the least cost technically feasible evaluation framework for works, might not be appropriate in locations that are likely to be a challenge to install overhead lines.
- Energia notes the Renewable NI response in providing a comparison of estimated completion dates from the last two TDPs for the six key projects highlighted in this TDP. Besides the sliding scale of delivery dates, two of the projects are scheduled to be completed for 2030. Given the history of delays in the total list of Asset Replacement Projects and Network Development Projects, Energia is concerned that any further delays will jeopardise the 2030 goals and inhibit the level of renewables that can be utilised. In a scenario where one or more of these key projects are delayed or an accumulation of other delayed projects, NI constraints will continue to be an inhibitor of renewable investment and also add considerable cost to the consumer.

3 General Comments

3.1 High Constraints

This year has seen some worrying figures developing with regard to NI constraint levels in particular. Based on SONI's Wind dispatch down reports, NI wind constraints have increased fivefold from SONI's own figures from 2022 (see below) from 5.8% constraints at the end of 2022 to 25.6% in Q4 2023. This year has seen record levels of interconnector imports, even during periods of high wind and corresponding to when wind is being curtailed. When the North-South interconnector comes on board, this should alleviate much of those constraints. Until then, constraint risk will be a significant concern. Additionally, as more synchronous condensers come online, this should help with minimum generation requirements – which are further exacerbating NI constraints.

3.2 TES 'Accelerating Renewables' Scenario

Energia notes the TES model 'Accelerated Model' scenario being used for identifying future needs from a grid development standpoint. Energia is concerned, however, that reinforcements presented in the Draft TDPNI will not be enough to deliver what is needed to achieve 2030 RE targets, and insufficient grid reinforcements may even be a significant barrier to achieving an Accelerated Model scenario.

Energia has responded on many other occasions to the specifics of what is holding back the build-out of renewable generation across the island of Ireland. Energia's view is that the absence of significant grid development and the lack of capacity to schedule multiple transmission and distribution outages to accommodate new renewable connections are the most important issues as the impediment to renewable deployment.

Energia is of the view that a paradigm shift in grid resourcing and scheduling is required to accelerate renewable connections, and that this should be called out in the TES, as government needs to understand the scale of the challenge and the resourcing required to achieve the targets.

Secondly, Energia is concerned that some of the overwhelmingly optimistic assumptions in TES will be used to inform grid development. Planning the grid based on scenarios in TES which are very unlikely to occur on the basis of the current trajectory runs the risk of diverting grid resources and schedules from projects which are substantially more feasible in the near-term (solar, onshore etc.) in favour of offshore projects that have a high risk of delay, and in some cases no contracted route to market.

3.3 Draft TDPNI projects

- Energia welcomes the intention to commence development of the North South interconnector. This single piece of infrastructure will mitigate much of the constraint levels that renewables in NI are subject to, particularly when the Moyle interconnector is importing as has been witnessed recently.
- Given the history of delays, Energia is concerned that any further delays will jeopardise the 2030 goals and inhibit the level of renewables that can be utilised. In a scenario where one or more of these projects are delayed, NI constraints will continue to be an inhibitor of renewable investment and add considerable cost to the consumer. Energia notes the Renewable NI response

in providing a comparison of estimated completion dates from the last two TDPs for the six key projects highlighted in this TDP. Besides the sliding scale of delivery dates, two of the projects are scheduled to be completed for 2030.