

RenewableNI response to Utility Regulator's RP7 Price Control Draft Determination

Introduction

RenewableNI (RNI) is the voice of the renewable electricity industry. 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.

RNI welcomes the opportunity to respond to the Utility Regulator's RP7 Price Control Draft Determination (Draft Determination). Decarbonisation of the power sector is vital to reaching the NI Executive's climate goals, and it can only be achieved by looking holistically to all areas within the Utility Regulator's (UR) remit. Significant investment in large-scale projects will be necessary to upgrade and reinforce Northern Ireland's ageing, existing network and the consumer's journey must be seen within this context. RNI actively supports a statutory net zero duty for the UR, and believes that an update of the UR's existing vires to prioritise decarbonisation, alongside security of supply and a just transition, will help to ensure sufficient investment to support the necessary grid infrastructure developments.

Having reviewed both NIE Network's (NIEN) ambitious programme of planned works for the RP7 price control period and the UR's Draft Determination, RNI sets out its position in detail below. RNI does welcome the UR's acknowledgement that NIEN has an important role to play in the energy transition and that RP7 must take a long-term view, underpinned by the goal of "delivering investment to facilitate" this transition. It is also encouraging to note the UR's understanding that the value of NIEN's work comprises both what it delivers for consumer needs, and also how it helps to achieve the targets set by the Climate Change Act (Northern Ireland) 2022 and the Northern Ireland Energy Strategy (Energy Strategy).

Policy Context

The UK Government has set in legislation a requirement for a 'net zero' economy by 2050¹. As the leader in decarbonisation, the power sector will have to achieve zero-carbon first, with heat and transport expected to significantly rely on electrification as the main way of cutting emissions. The UK Government has made a commitment to decarbonising the electricity system by 2035² and there is no caveat in the UK ambition excluding NI.

Furthermore, the UK will face a general election this year. The Labour Party, who could form the next government, has committed to bringing forward the UK target for zero carbon electricity to 2030³.

RNI successfully advocated for an ambitious 80% by 2030 renewable electricity target (80 by 30), which is now a legal requirement of our climate change legislation and will contribute to the UK government meeting its 2050 net zero pledge.

¹ UK becomes first major economy to pass net zero emissions law - GOV.UK (www.gov.uk)

² Plans unveiled to decarbonise UK power system by 2035 - GOV.UK (www.gov.uk)

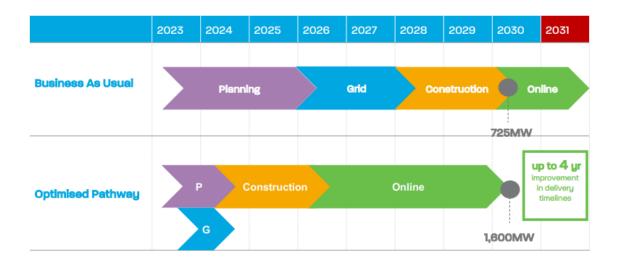
³ Pg. 6, Clean Power Mission Doc - 8 FEB AMENDS (labour.org.uk)



RNI has always contended that the 80 by 30 target was the minimum necessary to set us on a robust pathway to reaching Zero by 2035, and was a staging post for the longer term ambition. The previous 40% by 2020 renewables' target, galvanised a significant upsurge in renewable energy development, but once achieved, we saw inertia set in as it became an excuse to not invest in the next phase of infrastructure needed for 2030 and beyond. Consequently, having connected c. 400MW in 2017 alone, NI has only connected 86MW this decade. We cannot allow a similar policy 'cliff edge' following 2030 and take decisions with the longer term goals for 2035 and 2050 in mind.

RNI is greatly concerned that if key stakeholders continue with a business as usual approach, we are not on track to meet the 2030 target. To achieve the target, we need to see a consistent and significant upwards trend in renewable energy generation, yet most recent figures would indicate the opposite is occurring. The latest data from the Northern Ireland Statistics and Research Agency's (NISRA) reveal that in 2023 only 45.8 per cent of electricity was generated from renewable sources, a 5 per cent decrease from 20224. The Northern Ireland Affairs Committee at Westminster is currently overseeing an inquiry into renewable energy and net zero in Northern Ireland, specifically to understand the barriers NI faces in decarbonising and why renewable energy expansion has stalled.⁵

In its report Accelerating Renewables⁶, KPMG estimates that under a business as usual scenario, NI will only develop 725MW of the additional 1,900MW of the new renewable generation that is needed to achieve 80 by 30. Without a step change, we will not only fail to meet the target but miss it by a significant margin.



The restored Stormont Executive has multiple priorities to tackle, but RNI contends that the climate emergency necessitates a cross-departmental prioritisation of delivery of our renewable energy and net zero targets. RNI sees 2024, as we approach the decade midpoint, as an important juncture in the energy transition and a timely opportunity for a renewed and ambitious focus from all key stakeholders.

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⁴ Electricity Consumption and Renewable Generation in Northern Ireland (nisra.gov.uk)

⁵ MPs launch new inquiry on Northern Ireland's path to net zero - Committees - UK Parliament

⁶ RNI-Report-Accelerating-renewables-in-Northern-Ireland-online-version.pdf (renewableni.com)



The World Meteorological Organisation (WMO) confirmed this month⁷ that 2023 was the hottest year on record by a clear margin and sounded the "red alert to the world." The only "glimmer of hope" the WMO found was in the growth of renewable energy, with the global amount of renewable capacity added in 2023 almost 50% higher than in 2022, making it the highest rate achieved in the past two decades. When it comes to accelerating deployment of renewables, there is clearly no time for continued inaction in this critical decade.

General Points

RNI supports NIEN's position that it cannot continue with a business as usual approach as it heads into RP7. The scale of the challenge is extensive and the level of ongoing volatility in markets and supply chains is such, that certainty of investment is vital. RNI also agrees that NIEN must be allowed to be flexible and agile as it builds out the grid and innovates, particularly with respect to the fast pace at which emerging energy technologies evolve. RNI welcomes NIEN's ambitious approach to RP7, for which it requested £2.55 billion with the intention of creating some 1,000 new jobs as it revolutionises existing grid infrastructure.

RNI notes that the Draft Determination has provided for £2.2 billion of this figure which will result in a circa £300 million shortfall for NIEN. The Draft Determination does certainly provide a solid platform upon which to build the final determination, and from discussion with NIEN, RNI is aware that there has been strong engagement. RNI encourages the UR to continue this collaboration to ensure the most robust outcome for RP7 which can facilitate the energy transition and deliver for consumers and all stakeholders.

As we transition to net zero, demand for electrification is set to grow substantially, and sustained, significant private sector investment and innovation will be vital to realise the full benefits of a flexible, strengthened grid. Currently, lack of capacity on the network is deterring investment and endangering net zero. The network is an old one, which needs significant reinforcement, as both NIEN and the UR have acknowledged. RNI stresses that the network must be invested in now to give investors certainty that the demand for electricity can be supplied.

RP7 should allow NIEN to make ahead of, or in time investments, as opposed to current practice where network investment is lagging behind renewable generation connections. Given the network requirements to meet net zero targets, there are very low risks of stranded assets. It is important that anticipatory investment receives the necessary planning and completed land and environmental assessments so that the infrastructure can be built out. If the need for capacity is triggered by post-consented applications, the connection timelines will be a bottleneck to reaching targets, even if the development is ready. Aligning these requirements supports a whole system architect approach.

As the GB Electricity Networks Commissioner, Nick Winser, points out, grid projects cannot take 12-14 years when new renewable generation is being developed within seven years⁸. New generation and demand growth is outpacing the development of our network, resulting in inefficiency in the system which only increases costs for consumers and results in higher than necessary carbon emissions.

⁷ 'Red alert': last year was hottest on record by clear margin, says UN report | Climate crisis | The Guardian

⁸ Electricity Networks Commissioner: companion report findings and recommendations (publishing.service.gov.uk)



RNI notes a focus on minimum cost throughout the document. Considering the renewable energy goals for 2030 and beyond, a focus on what is to be considered a benefit for the medium and long term should also be considered, taking into account that a quicker energy transition is less expensive than a slow one in the long term.

The Draft Determination for RP7 highlights uncertainty, and how best to manage uncertainty. The UR concedes that we no longer work in a stable operating environment and that demands and expectations are changing rapidly. RNI acknowledges the importance of this, however also notes that there will always be a degree of uncertainty, due to new technology and other unforeseen factors on the way to net zero. RP7 should take into account that NIEN cannot provide certainty for each scenario, particularly with respect to innovation funding.

However, there are certainties and strong likelihoods. Achieving 80 by 30 will necessitate a significant expansion of onshore wind, solar and battery storage. We can confidently predict where the demand for connections will be through the RNI pipeline data, the full detail of which is shared with NIEN. The summary of this pipeline data is included at Appendix 1.

Furthermore, the draft Offshore Renewable Energy Action Plan (OREAP)⁹ sets a target of 1GW of offshore renewables from 2030. RNI is aware of c. 3GW of projects in the pipeline. While the likely location of offshore developments will only begin to become clear following completion of the Strategic Environment Assessment later this year, and offshore projects will connect via the transmission network, these projects will require onshore connections and it is vital that NIEN are resourced to facilitate these crucial projects in terms of NI's decarbonisation journey and future green growth.

It is noted that there is no proposed review of the Statement of Charges as part of RP7. However, RNI understands that NIEN has been engaging with UR in relation to changing the connections charging methodology to a more shallow basis in order to support the expected widespread transformation of the network to support the connection of distributed low carbon technologies.

The UR's review of connection charge methodology is ongoing, but the Draft Determination makes clear that pending the outcome of that work, it does not intend to make any specific provision for these charges in the RP7 price control.

According to the UR's draft Forward Work Programme¹⁰, this project is to be delivered at an indeterminate point in 2024/2025, which RNI would argue is not only too vague, but also does not recognise the need to urgently address the issue of charging connection policy, which is putting Northern Ireland at a stark and persistent competitive disadvantage to our neighbours.

The publication of the high-level design for a future NI renewable electricity support scheme (RESS) and the first auction in 2025, are imminent, and are to be underpinned by the consumer. If NI's regime continues to charge developers for the full costs of connections, then bids into the upcoming auction will consequently be higher to cover those costs. This will either deter investment in NI renewables or will result in increased bid prices and lock local consumers into higher prices for 15 years than would be the case under a shallower charging regime. Either way, consumers will be liable for higher than necessary costs.

⁹ <u>Draft Offshore Renewable Energy Action Plan for Northern Ireland (economy-ni.gov.uk)</u>

¹⁰ Pg.20, <u>Draft FWP 20 December 2024.pdf (uregni.gov.uk)</u>



Furthermore, Northern Ireland wind generation has been experiencing unsustainably high levels of dispatch down. 2023 saw indisputably worrying figures developing with regard to constraint levels in Northern Ireland. Based on SONI's Wind dispatch down reports, NI wind constraints have increased almost fivefold from SONI's own figures from 5.8% constraints at the end of 2022 to 25.6% in Q4 2023. 2023 and the early months of 2024 have also seen record levels of interconnector imports, even during periods of high wind and sometimes corresponding to when wind is being curtailed.

Displacing the domestic renewables industry in NI will have a profound and detrimental impact on both the government's climate targets and the cost to the NI consumer. When the UR is considering the cost to NI consumers as part of RP7, RNI would propose that the regulator consider how the current level of constraints, highly likely to continue in the immediate future, is risking the economic viability of existing investments, and could ultimately, raise costs to consumers in the form of higher RESS bid prices.

To that end, and with the UR's mandate to ensure lower costs for consumers, RNI would urge the UR to accelerate determination of its next steps document as part of the ongoing review of electricity connections cost allocation.

RNI also notes that there is no mention of small scale renewable energy development, and would ask that the UR discuss further with NIEN what its future plans are for projects of under 5MW.

Utility Regulator messaging

RNI notes that in its Draft Determination, that the UR's messaging focuses almost exclusively on the cost to the consumer of the proposed investment, rather than its significant long-term value. Within the initial pages of the document, in the executive summary, the UR states that "whilst the additional investment [made in RP7] will increase the network cost for electricity consumers, we will ensure that the transition is affordable, fair and inclusive for all." Notwithstanding the importance of a just transition, RNI would question why in stating that there will be an increased cost for consumers, no mention is made of the longer-term value and, ultimately lower costs, that a flexible, strengthened grid which can facilitate greater levels of cheaper renewables, will deliver. RNI hopes that as part of future expansion of its vires, that the UR will also adopt a less myopic view on what constitutes protection of and value for consumers.

The UR has proposed consenting to a £2.2bn investment by NIEN. While RNI would argue that this figure needs to be higher, we would also recommend that an approval of this level of spend (ultimately underpinned by the consumer) should be accompanied by outlining in clear terms the value to the consumer. Without this transparency the result will simply be that the hard pressed consumer feels further put upon. The UR in making its final determination will only grant spend where there is consumer value, and so needs to highlight this value and 'sell' its own decision to the consumer whose interests it exists to protect.

Furthermore the UR, on behalf of the consumer, should evaluate and articulate the ultimate long-term cost of not investing in the necessary infrastructure to enable the energy transition.



We have known since the Stern Review in 2006¹¹, that delaying decarbonisation will result in a steeper shift and higher costs for the consumer, our economy and planet.

This response to the regulator's Draft Determination is one of many UR consultations which RNI and other key industry voices have contributed to in the past six months. There is a broad consensus across the renewable electricity industry on many key positions, particularly the pressing need for anticipatory investment, innovation and prioritisation of decarbonisation, and these are frequently reiterated in responses. RNI does question whether this substantial amount of evidence is being acknowledged and actively factored into the UR's planned programme of work and future approach as we work to 2030.

IT and digitalisation

In the UR's draft determination there is an acknowledgement that "there is a need to simultaneously digitally transform the business" in order to facilitate and futureproof the grid. However, NIEN's ambitious IT and digitalisation programme was deemed to be of an "unprecedented size and scope" and the UR requested it be scaled back so that both NIEN and NI's electricity consumers would benefit from a longer period to "mature the planning" of these IT programme updates.

RNI contends that IT project workstreams, which are needed to enable proper functioning of scheduling and dispatch for batteries, non-priority wind and new technology must be prioritised and put in place before other systems can properly run (i.e., Future Arrangements for System Services). Putting the upfront cost of these IT projects in the context of the overall transition will ultimately result in lower cost to the consumer by facilitating proper utilisation of renewables and low carbon technologies.

Anticipatory investment

To date NI has developed its grid infrastructure only when a project has sought connection and is in receipt of planning permission. This approach and the concomitant delays are no longer sufficient to achieve 80 by 30 and it is vital that we now build out the grid ahead of time. RNI will continue to provide NIEN with pipeline data as well as analysis as when projects are likely to connect. Support from the UR for significant anticipatory investment going forward will be key.

RNI notes that NIEN requested that £150 million of distribution network reinforcement allowances to be provided ex-ante and that any re-opener mechanisms were not able to claw back any previous allowances.

In the UR's Draft Determination, the primary network reinforcement allowance has been reduced by 10%, and the UR has proposed that clawbacks may be possible if forecasts alter. With this possible risk of disallowances and no ex-ante funding for secondary network reinforcement, it will be impossible to create an environment which is conducive to ambitious and anticipatory investment by NIEN.

NIEN must be given the requisite certainty to advance and develop its supply chain and build out necessary grid capacity. RNI, therefore, supports NIEN's position that allowances be

¹¹ The Stern Review



provided ex-ante and re-openers are used exclusively to release new funds effectively and do not permit clawbacks.

D5 Reform

RNI notes that NIEN proposed reform of the pre-construction aspect of the D5 mechanism during RP7. RNI welcomed NIEN's proposed approach to improve efficiency of the mechanism by initially self-funding the pre-construction work and then retrospectively claiming it when the project progressed. Given the scope and scale of the work NIEN must undertake in this decade to meet 80 by 30, and the impact delays in the pre-construction phase can have, RNI welcomed this pragmatic approach and acknowledged the additional risk for NIEN.

However, in the Draft Determination, despite accepting the reform in principle, RNI is disappointed to see that additional, onerous criteria have been introduced, namely reducing the threshold to £1.5 million (which RNI understands excludes over 50% of projects that would have been eligible), and a requirement that the aggregate pre-construction costs do not exceed more than 12.5% of total allowed capex for the projects.

Since the latter part of 2023, dispatch down of renewable generation output due to grid constraints has risen to circa 25% of available renewable energy output. By most projections, this trend is expected to be sustained or worsen in the short term and thus will act as a significant disincentive for renewable generation in NI unless strategic steps are taken to address this.

A higher threshold to facilitate the use of the D5 pre-construction mechanism by NIEN, would for instance, facilitate the full utilisation of RP7 capex allowance to speed up projects that can increase the capacity of the transmission network.

Considering, also, the challenging macroeconomic environment in which NIEN is operating, with significant supply chain and inflationary challenges, RNI would propose that the UR raise the minimum value limit for these transmission network reinforcement projects.

This would mean that the UR only has to approve the largest and riskiest projects and would permit NIEN to advance with vital transmission infrastructure build-out (over 50% of transmission projects could then avail of this benefit). RNI would also argue that the imposition of the 12.5% criteria is overly restrictive and will only serve to reduce the efficacy of NIEN's proposed reforms to the D5 mechanism.

Innovation

RNI understands that RP7 represents a significant and ambitious investment in NI's electricity grid. With a noted desire to replicate the success which RP6 innovation funding delivered (£6.6 million released £25 million of customer savings in RP7), and acknowledging the scale of the net zero challenge, NIEN has now requested £8.8 million ex-ante funding for eleven defined innovation projects and an network innovation fund. Both are indispensable in developing a flexible and integrated energy system capable of facilitating net zero.

RNI notes with disappointment that the UR has reduced the amount of innovation funding available to £4.7 million. The level of justification which the UR will require that NIEN provide on specifics of the projects is too extensive and by no means commensurate with how



typical innovation business cases are evaluated. Moreover, specific detail is, unsurprisingly, often only available on delivery or after completion of the project.

RNI represents the voice of the renewable electricity industry, who reflect NIEN's assertion that this decade is critical and must be the most innovative to date. Many of the emerging technologies which will play an important role in NI's future energy mix are still in their infancy, and RNI would advocate for an approach which is as flexible and accommodating as possible with respect to how such technologies may evolve.

RNI would also argue that any underspend on innovation now which may be perceived as a saving for the current consumer will ultimately be passed back to future consumers. To that end, RNI proposes that an increase in allowance for the eleven defined projects be provided for by the UR.

NIEN also requested a Network Innovation Fund which would operate as an annual reopener mechanism to release additional funding for other projects, including whole system projects, when they materialise throughout the period. RNI supported this type of responsive and agile approach for NIEN. However, only one mid-point reopener was provided for, which would not result in prompt timescales to innovation proposals. RNI, therefore, supports NIEN's request for an increase in the frequency of these needed re-opener mechanisms.

Unit cost flexibility

Cost volatility has and continues to be a major issue for NIEN. RNI understands that in its calculations, the UR has inconsistently used 2021/22 and 2022/2023 as the base year for costs and that this does not reflect the real cost that NIEN will face as it does business over the RP7 period, particularly in procurement of materials.

Given that market volatility will likely continue into the future, RNI would support NIEN's proposal that a unit cost mid-point review be introduced. This would allow for 3 years of data to be considered by the UR and then, if needed, unit costs could be amended accordingly. This opportunity for review would give sufficient comfort to NIEN, promoting a proinvestment approach and also offering consumer protection.

Energy storage

RNI noted in our response to NIE Networks consultation on the approach to planning for the RP7 price control period from 2025-2031, that energy storage was not addressed in any detail. In the Draft Determination, specifically the strategic context to RP7, the UR clarifies that the work NIEN will do in RP7 will be critical in delivering the "flexible, resilient and integrated energy system" as set out in the Energy Strategy, and states explicitly that storage solutions such as batteries will be vital to "enable flexible access to low-carbon energy when renewable generation is low."

If the purpose of RP7, as the UR has said is to facilitate the energy transition, then RNI stresses that without due consideration of energy storage, a vital decarbonisation enabler and component of future grid infrastructure has been omitted.



RNI restates its queries as to why NIEN did not consider the importance of energy storage as an vital part of grid scale investment, and noted the myriad of benefits that energy storage can bring in this regard.

Energy storage, particularly of longer durations will be essential to decarbonising our energy system by providing a range of valuable services from congestion management, peaking capacity, alternative network solutions, facilitating increased renewables on the grid, delivering cost benefits to end consumers, and ensuring security of supply.

Strategic deployment of long-term energy storage in transmission constrained regions of the network can reduce the dispatch-down of renewable generation, providing an alternative approach to network reinforcement and unlocking additional carbon savings. Additionally, it is important that a joined up approach to energy storage is adopted, as is the case in the Republic of Ireland (ROI).

RNI notes that the Department of the Environment, Climate and Communications (DECC) has been undertaking an consultation on developing an electricity storage policy framework for Ireland. RNI reiterates our position that NIEN should consider the approach adopted in ROI and ensure that energy storage is facilitated and developed in a complementary way in NI.



Appendix 1

RenewableNI Pipeline Summary, November 2023

Onshore Wind

Planning Authority	Capacity (>5MW)	Capacity (1-5MW)	Capacity (<1MW)	Total Capacity (MW)
Antrim & Newtonabbey	12	2	6	19
Ards & North Down	0	0	5	5
Armagh City, Banbridge & Craiga	0	4	11	15
Belfast	0	6	1	7
Causeway Coast & Glens	400	5	19	424
Derry City & Strabane	442	3	13	458
Fermanagh & Omagh	305	6	44	356
Lisburn & Castlereagh	0	0	5	5
Mid & East Antrim	67	8	11	85
Mid Ulster	103	11	26	139
Newry, Mourne & Down	0	0	9	9
Strategic Planning Division	631	0	0	631
Total	1959	44	149	2153

Solar

Planning Authority	Capacity (>5MW)	Capacity (1-5MW)	Capacity (<1MW)	Total Capacity
Antrim & Newtownabbey	0	0	0	0
Ards & North Down	0	0	0	0
Armagh City, Banbridge & Craigavon	30	0	0	30
Belfast	0	0	0	0
Causeway Coast & Glens	335	1	0	336
Derry City & Strabane	0	0	0	0
Fermanagh & Omagh	0	5	0	5
Lisburn & Castlereagh	80	0	0	80
Mid & East Antrim	0	0	0	0
Mid Ulster	0	0	0	0
Newry, Mourne & Down	0	0	0	0
Strategic Planning Directorate	140	11	0	150
Unknown	90	0	0	90
Total	674	17	0	691



Battery Storage

Planning Authority	Capacity (>5MW)	Capacity (1-5MW)	Capacity (<1MW)	Total Capacity
Antrim & Newtownabbey	50	6	0	56
Ards & North Down	41	2	0	43
Armagh City, Banbridge & Craigavon	62	4	0	66
Belfast	50	0	0	50
Causeway Coast & Glens	125	1	0	126
Derry City & Strabane	157	0	0	157
Fermanagh & Omagh	110	0	0	110
Lisburn & Castlereagh	125	0	0	125
Mid & East Antrim	206.6	2	0	209
Mid Ulster	534	4.99	0.8	540
Newry, Mourne & Down	91	2	0.25	93
Strategic Planning Directorate	-	-	-	0
Total	1552	21.99	1.05	1575