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RP7 Draft Determination Response

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1. Introduction

Kelvatek welcomes the opportunity to respond to the Utility Regulator for Northern Ireland's (UREGNI) draft determination for the upcoming regulatory price control period, RP7, which spans from April 2025 to March 2031. As significant stakeholders in the Northern Ireland (NI) energy industry, Kelvatek recognises the pivotal role that this regulatory decision plays in shaping the future of energy distribution and transmission networks within the region.

In this response we address the following areas of concern for Kelvatek in the RP7 Draft Determination.

- Observation on Load Growth Projections and Load Related Expenditure
- Observation on Connections
- Position on IMFT&I
- Position on Other Costs
- Position on Worst Served Customers
- Position on RP7 Approach to Innovation
- Position on Evaluative Performance Framework

NIE Networks, responsible for the construction and upkeep of electricity transmission and distribution networks in Northern Ireland, stands as a cornerstone of the region's energy infrastructure. The economic regulation imposed upon NIE Networks ensures a balance between quality and cost, safeguarding the interests of electricity consumers across NI. Under the scrutiny and challenge of the Utility Regulator, NIE Networks' revenue collection via supplier tariffs is determined periodically, with RP7 being the focus of our current deliberations.

Kelvatek's involvement in the energy landscape extends beyond the borders of Northern Ireland. With extensive experience collaborating with Distribution Network Operators (DNOs) and the Office of Gas and Electricity Markets (Ofgem) in Great Britain, Kelvatek brings a wealth of knowledge and expertise to the table.

Kelvatek is well-placed to offer informed commentary on the regulatory variations between Northern Ireland (NI) and Great Britain (GB). Being based in NI, we possess an intimate understanding of the local energy sector, allowing us to appreciate the specific challenges and nuances within the market.

Additionally, our extensive collaboration with Distribution Network Operators (DNOs) throughout the UK provides valuable insights into regulatory frameworks and practices. Regular engagements with members of the Energy Networks Association (ENA) and OFGEM further enhance our understanding of regulatory dynamics, enabling us to provide considered perspectives on the differences between NI and GB regulations. This combined experience uniquely positions Kelvatek to offer valuable insights into energy regulation across different regions.

NIE Networks submitted their comprehensive Business Plan in March 2023, outlining their strategic objectives and expenditure requests for the upcoming regulatory period. The scrutiny applied to NIE Networks' plans encompasses an evaluation of their network development, operational strategies, and maintenance initiatives, all contextualised within the framework of consumer needs.

Integral to this regulatory period is the alignment with Northern Ireland Executive's Energy Strategy and the mandates set forth by the Climate Change Act (Northern Ireland) 2022. As energy usage evolves in tandem with the adoption of decarbonised power, heat, and transportation solutions, RP7 stands as a crucial enabler of this transition. The significant investment required, as outlined in the Energy Strategy, underscores the importance of this regulatory period in shaping Northern Ireland's energy landscape for the foreseeable future.

RP7 not only lays the groundwork for Northern Ireland's transition towards net zero emissions but also underscores the imperative for a more efficient utilisation of the electricity transmission system. As highlighted in the draft determination, UREGNI proposes adjustments to NIE Networks' revenue entitlement, capital expenditure allocations, and rate of return on capital. These adjustments, reflecting thorough analysis and discussion, aim to achieve a careful equilibrium between enabling essential investments and protecting the interests of electricity consumers. However, in the opinion of Kelvatek it should be noted that the draft determination may not consistently serve this balance in all cases.

We also note with some disappointment that there are still open issues that are considered outside the scope of RP7 that includes reform to connection charges and domestic smart metering.

Kelvatek's response to the draft determination is structured to address specific sections and annexes that we've identified as areas of particular interest to our organisation in our role as stakeholders in the Northern Ireland energy industry. We've highlighted these sections for analysis and provided targeted feedback accordingly. By focusing our response on these key areas, we aim to offer concisely our thoughts on specific areas of concern to us. Our goal is to engage in a productive dialogue that leads to the development of robust regulatory policies beneficial to all stakeholders in the Northern Ireland energy industry.

2. RP7 DD Main Document

2.1 1.7 Observation on Load growth projections and Load Related Expenditure

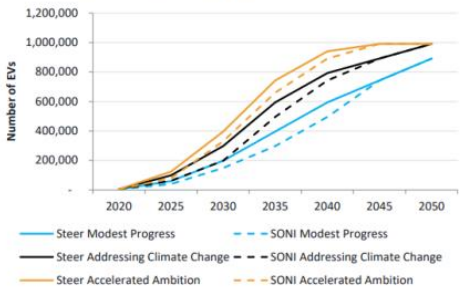
As of this year, there are currently 20,938 EVs on the roads of Northern Ireland. Registrations nearly doubled between 2020 and 2021, rising from 4,722 to 8,501, and approximately doubled from 10,280 in 2023 to the current figure. If the trend in new EV registrations continues, EV uptake could reach the high hundreds of thousands by 2030, excluding external pressures such as fluctuations in electricity prices or insufficient charging infrastructure. It is possible that NIE Networks' forecasting, based on SONI baselines, is too conservative, leaving little margin for error in the acceleration of uptake.

Table 4-1: EV uptake % by scenario

Scenario Name		2025	2030	2035	2040	2045	2050
Modest Progress	Steer Forecast	6%	20%	40%	60%	75%	90%
	SONI Study Forecast	4%	15%	30%	50%	75%	90%
Addressing Climate Change	Steer Forecast	10%	30%	60%	80%	90%	100%
	SONI Study Forecast	6%	20%	50%	75%	90%	100%
Accelerated Ambition	Steer Forecast	12%	40%	75%	95%	100%	100%
	SONI Study Forecast	8%	33%	67%	90%	100%	100%

We forecast there will be between 60,000 and 125,000 EVs in Northern Ireland in 2025 which will increase to 400,000 EVs by 2035 in the most conservative scenario (Modest Growth) and 750,000 EVs in Accelerated Ambition scenario. Figure 4-1 presents our forecast for EV numbers (passenger cars) in each of the three scenarios above.

Figure 4-1: EV forecasts for Northern Ireland, by scenario



Our general observation regarding the modelling of EV uptake is that no model disputes the eventual outcome, which is the widespread electrification of transport by 2050. Rather, the focus lies on the rate of change that will occur. In this regard, it should not be a question of over or underinvestment, but rather an efficiency factor in spending. However, the fact remains that if sufficient investment is not promptly made into the grid, Northern Ireland risks non-compliance with Net Zero targets set for 2035 and 2050.

In this context the current UR stance on applying volume drivers to LRE for secondary network investment raises concerns regarding investment uncertainty and continual replanning. This approach introduces control measures that may result in the UR holding back allowances on an annual basis, creating instability in investment planning and jeopardising the continuity of the capital expenditure program. Treating all LRE for secondary network investment equally disregards the varying nature and significance of these expenditures within the network investment framework. However, NIE Networks proposed approach of implementing an ex-ante allowance combined with a volume driver and mid-point review offers a better alternative. This approach mitigates the impact of investment uncertainty by providing NIE Networks with a predetermined allowance for LRE expenditure, allowing for more informed investment decisions and reducing the need for continual replanning. Additionally, the mid-point review ensures that any adjustments can be made to the investment plan based on actual progress and emerging needs, enhancing the effectiveness and efficiency of the investment process.

2.2 7.15 Observation on connections

In response to the current uncertainty around connections charging, we advocate for the implementation of a socialised connections cost model similar to that of GB. This approach is crucial for optimising connections equitability and ensuring a fair transition to net zero for all consumers in Northern Ireland (NI). Several key reasons support this stance:

Firstly, NIE Networks cannot be expected to accurately predict and target reinforcement of network capacity in the interim. Under the current connection regime, there is a significant risk of certain consumers being left behind in the net zero transition, particularly as demand for low carbon technologies (LCT) increases. The existing regulation, based on forecasted net zero conditions, could potentially burden certain demographic groups with reinforcement costs under the non-contestable connection cost classification.

Although adopting a connections regime similar to GB may lead to increased bills for all NI consumers, it ensures that all receive equitable treatment regardless of their speed of LCT adoption. This socialised approach spreads the costs more evenly across the consumer base and mitigates the risk of inequitable financial burdens on certain individuals or groups.

Customers should indeed pay a fair price for the cost of the work required to connect them. However, the current system's reliance on individual customers to bear the entire cost of network enhancements can lead to inequities, particularly in areas where demand for connections outstrips network capacity. Facilitating competition in the connections market is commendable, but it may not address the fundamental issue of ensuring equitable access to network capacity for all consumers.

It is essential to consider that economic conditions, government policies, and planning restrictions can significantly influence the demand for new connections. Therefore, DNOs must adopt a flexible approach that balances the need for network enhancements with ensuring fairness and affordability for all consumers. Socialising connection costs helps achieve this balance by spreading the financial burden across the entire consumer base, rather than placing it solely on individual customers seeking connections.

In conclusion, the adoption of a socialised connections cost model akin to GB's approach is imperative for promoting equitable access to network capacity and facilitating a fair transition to net zero in Northern Ireland. This approach aligns with the principles of fairness, affordability, and sustainability, ensuring that all consumers benefit from the transition to a low carbon energy future.

2.3 Position on IMFT&I

NIE Request: £108.68 per annum pass through

UREGNI Position: Minded to £88.8 per annum ex-ante

Kelvatek Position: Disagree with regulator minded position

Kelvatek does not support the Utility Regulator's decision to reduce the settlement for IMFT&I allowances in the draft determination, as this poses a significant risk to the successful delivery of NIE Networks' capital investment program. The EY Cost Benefit Analysis on the RP7 NIE Networks investment underscores the importance of additional funding for expanding and reinforcing the electricity grid. According to the report, "If NIE were to receive additional funding from the UR to invest and expand the electricity grid, a larger and more resilient grid will result in increased operating costs. The total operating costs

for the BV scenario are £853 million for the RP7 period. 55% of total operating costs for the BV scenario go towards indirect costs at £512 million. The second highest cost category are the IMF&T costs which will be £180 million (19%) for the 6 year period. The annual opex is higher overall for the BV scenario than the BAU scenario. Annual operating costs for the BAU case begins at £65 million in 2025/26, and remains constant at £108 million per year for the period to 2031."

The analysis highlights the substantial operating costs associated with a larger and more resilient grid, emphasising the necessity for sufficient financial resources to meet these demands. By curtailing the settlement for IMFT&I allowances, the UR risks hindering NIE Networks' ability to execute essential capital projects, jeopardising the reliability and resilience of Northern Ireland's energy infrastructure.

Moreover, the UR's decision fails to acknowledge the escalating costs and competition for skilled manpower in the energy sector, both locally and nationally. Rising fault costs and network management expenses, coupled with intensified competition driven by renewable energy projects and capital expenditure programmes, necessitate robust financial support to ensure the effective operation and maintenance of energy networks.

Kelvatek urges the UR to reconsider its stance and provide NIE Networks with the necessary financial backing to fulfil its capital investment obligations. Failure to do so not only compromises the reliability and resilience of Northern Ireland's energy infrastructure but also undermines the region's ability to meet its net zero targets and adapt to evolving climate-related risks.

2.4 Position on Other Costs

NIE Request: £0.93m per annum pass through

UREGNI Position: Minded to £0.64 per annum ex-ante

Kelvatek Position: Disagree with regulator minded position

The exclusive focus on historic spend rates, as advocated by UREGNI, may be considered reductive as it overlooks critical factors influencing future investment needs, particularly regarding the increasing frequency of severe weather events. While it's true that historic spend rates may not demonstrate a significant increase, it's essential to recognise the evolving nature of climate-related risks and their potential impact on infrastructure resilience.

Contrary to the narrow approach of solely relying on historic spend rates, the position outlined by the National Audit Office (NAO) underscores the importance of considering a broader range of factors when evaluating

infrastructure resilience. The NAO highlights the necessity for energy network operators to develop outcomes-focused physical network resilience standards, especially in light of extreme weather events exacerbated by climate change. Recent events like Storm Arwen have underscored the limitations of existing planning assumptions and the critical need to incorporate updated forecasting capabilities, response plans, and technology improvements to enhance resilience and storm response.

Furthermore, the failure to reference Storm Arwen and its associated learnings in the draft determination represents a missed opportunity to adopt insights from the GB regulatory framework. This omission not only underscores a disparity in standards between GB and NI consumers but also highlights the need for a more comprehensive and forward-thinking approach to infrastructure planning and investment.

In addition to the considerations highlighted by the National Audit Office (NAO), it's imperative to acknowledge the insights provided by the latest Intergovernmental Panel on Climate Change (IPCC) report regarding the projected increase in global precipitation with rising temperatures. The IPCC report underscores the significant impact of climate change on precipitation patterns, stating that "it is virtually certain that, in the long term, global precipitation will increase with increased global mean surface temperature." This projection is particularly concerning as warmer air holds more moisture, leading to an elevated risk of heavy rainfall events and higher straight line windspeeds and gusting in various regions worldwide.

Furthermore, the IPCC report highlights the potential for a substantial increase in precipitation intensity due to slow-moving storms, which could result in fourteen times more frequent occurrences of high rainfall accumulations across Europe by 2100 under high emissions scenarios. This projection underscores the urgent need for robust infrastructure resilience measures to mitigate the potential impacts of increased precipitation extremes.

In light of these projections and research findings, it becomes evident that a comprehensive approach to infrastructure planning and investment, which incorporates climate resilience considerations, is essential. Failure to account for the potential impacts of increased precipitation extremes could exacerbate the vulnerability of energy infrastructure and jeopardise the long-term sustainability of energy networks. Therefore, it is imperative to adopt a forward-thinking strategy that integrates climate resilience measures into infrastructure

planning to safeguard the interests of energy consumers and ensure the resilience of energy networks in the face of changing climate conditions.

In conclusion, while historic spend rates offer valuable insights, they should not be the sole determinant for future investment decisions, particularly given the evolving risks associated with climate change. It is imperative to adopt a comprehensive approach that considers factors such as climate resilience, enhanced forecasting capabilities, and technological advancements to bolster infrastructure resilience and improve storm response mechanisms.

It is crucial to recognise that in regulated monopolies like energy networks, changes in spending patterns are often driven by incentives or mechanisms that aim to achieve specific measurable outcomes. These mechanisms play a vital role in incentivising network operators to adapt to evolving circumstances, enhance infrastructure resilience, and effectively respond to extreme weather events. Therefore, a robust and flexible regulatory framework is essential to encourage proactive investment in resilience and technological innovation.

By prioritising these measures, we can better prepare our energy infrastructure to withstand the challenges posed by climate change and ensure the continued reliability and sustainability of energy supply for consumers. This approach underscores the seriousness of the task at hand and the critical importance of proactive action in addressing the impacts of climate change on energy infrastructure.

3. Annex M Incentives

3.1 Position on Worst Served Customers

- **NIE Request:** Ex-Ante allowance for Worst Served Customers (WSC) £3m to reduce WSC by 50% in the RP7 period
- **UREGNI Position:** Minded to disallow the funding proposed for WSC
- **Kelvatek Position:** Disagree with regulator minded position

Ensuring network reliability is vital for a successful transition to Net Zero, especially for customers facing poor service levels. DNOs must guarantee reliable networks as low carbon technologies become more prevalent and working patterns evolve, as highlighted by the COVID-19 pandemic. This

reliability is particularly crucial for wort served customers, as supply disruptions disproportionately affect them.

We acknowledge that the RIIO-ED1 WSC mechanism, as implemented in Great Britain by OFGEM set rules, did not lead to the anticipated widespread uptake of funding or solutions. This outcome is partly attributed to the stringent definition of a Worst Served Customer (WSC) and the specific parameters required for DNOs to recover relevant funding. Kelvatek are pleased to note that in Northern Ireland Electricity Networks proposal to the regulator that the "use-it-or-lose-it" approach to funding allocation was not recommended with an ex-ante approach preferred. The use-it or lose it approach hindered uptake, as DNOs only recovered costs upon meeting these parameters. A comparison of expenditure in RIIO-ED1 revealed that ex ante allowances for dedicated schemes, for some DNO's, had seen higher expenditure compared to allocations made on a use-it-or-lose-it basis.

OFGEM's departure from UREGNI's position is marked by its introduction of a specific WSC incentive on an ex-ante basis within the regulatory framework. This departure underscores OFGEM's recognition of the distinct challenges faced by the most vulnerable consumers within the energy network. By offering targeted incentives aimed at improving service levels for these customers, OFGEM seeks to address disparities in reliability and accessibility, ensuring that the energy transition is inclusive and equitable for all.

UREGNI's perspective, articulated in their statement, emphasises the belief that the allowance for high voltage (HV) overhead line works during RP7 already provides adequate funding and flexibility for NIE Networks to fulfil its WSC aspirations. However, it's important to note that UREGNI's stance raises concerns about the potential lack of alignment between circuits targeted for replacement and those serving the worst served customers. This suggests a potential gap in addressing the needs of the most vulnerable consumers within the regulatory framework.

The minded position also raises concerns that the proposed improvements for Worst Served Customers (WSC) may be double rewarded through the reliability incentive, potentially rendering the capital allowance redundant and leading to over-compensation for NIE Networks. Consequently, there is a proposed stance to disallow the funding proposed for WSC. However, this stance overlooks the fundamental rationale behind the development of a specific Worst Served Customer award within the RIIO framework in GB.

Customers classified as worst served experience interruptions caused by faults on the HV network. These interruptions stem from factors such as the cost of improving reliability in that part of the network outweighing the benefits to other parts of the network with potentially higher levels of customer numbers amongst other factors. However, from a customer's perspective, the origin of the fault should not alter the level of service they receive. This is the reason why OFGEM have introduced a specific ex ante allowance to incentivise DNOs in GB to improve service for customers that in the status quo regulatory environment would be economically questionable. In fact, OFGEM directly addresses the 'double reward' with the following statement: "The IIS is in place to drive overall improvements to network reliability across all voltage levels; the WSC mechanism is designed to provide funding to improve the service experienced by those customers who receive the poorest levels of performance. We believe that the IIS provides the incentive to DNOs to carry out investment to improve reliability at lower voltages (where the cost of this work is often lower) and that the WSC mechanism should remain focused on higher voltages."

The contrasting approach taken by OFGEM in Great Britain, where funding was allocated for both HV reinforcement works and incentive for worst served customers, highlights the divergent regulatory strategies employed by different regulatory bodies. OFGEM's decision to introduce a specific incentive for worst served customers acknowledges the importance of prioritising the needs of these consumers, reflecting a proactive approach to inclusivity within the energy sector.

4. Annex N Innovation

4.1 Position on RP7 Approach to Innovation

NIE Request: £19.1m to fund network innovation

UREGNI Position: innovation fund value of £4m

Kelvatek Position: Disagree with regulator minded position

The innovation approach in Great Britain (GB) underscores the importance of robust funding mechanisms and strategic focus on technological advancement within the energy sector. GB networks benefit from access to various funding streams, including the Strategic Innovation Fund, which allocates £450 million over the ED2 period, and the Network Innovation Allowance, providing around £210 million over the same timeframe. These funds empower GB networks to

invest in a diverse range of innovative projects aimed at enhancing efficiency, reliability, and sustainability in energy distribution and transmission networks.

In 2016, OFGEM commissioned an independent evaluation of the Low Carbon Network Fund (LCNF). The LCNF allocated funding to a variety of projects, amounting to £250 million. The report estimates net benefits ranging from £800 million to £1.2 billion from the scheme when projects are fully implemented by the trialing companies. Additionally, it suggests that the potential net benefits could increase up to six-fold when considering a nationwide rollout across Great Britain.

However, the disparity in access to innovation between Northern Irish consumers and their counterparts in GB raises questions and potential implications for the Northern Irish energy sector. Given Northern Ireland's unique challenges, particularly with significantly higher levels of intermittent renewable generation compared to GB, tailored innovation solutions become increasingly necessary. Failure to address these challenges adequately risks leaving Northern Ireland behind in the transition towards a more sustainable energy future.

Moreover, the consideration of well-justified innovation projects is subject to interpretation, highlighting the importance of fostering a supportive regulatory environment that encourages risk-taking and innovation. Monopoly network companies often exhibit reluctance to undertake significant innovation due to the shared savings mechanism, potentially leading to lower cost allowances in future price controls. Recognising that innovation inherently involves a level of risk, incentivising innovation is crucial for driving progress and efficiency within the energy sector.

Kelvatek disagrees with the Utility Regulator's position, emphasising the importance of prioritising innovation within the Northern Irish energy sector. While there is reasonable evidence suggesting that network innovation incentives provide value for money and foster a more innovative culture within network companies, Northern Ireland must not be disallowed from leading the way in innovation.

The wider societal benefits of innovation are undeniable. For instance, a recent report commissioned by the Energy and Climate Intelligence Unit (ECIU), with analysis provided by CBI Economics and The Data City, revealed that the UK’s net zero economy grew by 9% in 2023. The total gross value added (GVA) by businesses involved in the net zero economy now stands at £74 billion. The analysis also found that jobs in the net zero economy are highly productive,

generating £114,300 in economic activity, more than one and a half times the UK average of £72,550. They are also better paid by almost £10,000, with the average net zero salary being £44,600 compared to the £35,400 UK average. These figures underscore the significant economic potential of investing in innovation within the energy sector. Additionally, the Net Zero economy has been enabled in part by the energy innovation funds, which have enabled energy networks to connect and support them and create economic opportunities to significantly grow the sector. The vision of the Energy Strategy for Northern Ireland is to deliver energy efficiency savings of 25% from buildings and industry by 2030, achieve a 70% renewable energy mix by 2030 and support the 10X Economic Vision by double the size of the green and low carbon economy to 2 billion by 2030. The role of NIE Networks and targeted NI specific innovation in this area to achieve these savings and growth targets is essential. For every pound spent in well justified, targeted innovation this can expect to be paid back in growth and savings to the consumer. This proposed ongoing mismatch in innovation funding between GB and NI will serve to increase the problems of advancing economic development in NI.

5. Annex V Evalutive Performance Framework

5.1 Position on Evaluative Performance Framework

- **UREGNI Position:** Symmetrical Incentive/Penalty +/- £3m Non-Baselined minded position
- **Kelvatek Position:** Disagree with regulator minded position

The symmetrical approach outlined in the Draft Determination for evaluating NIE Networks' performance, with equal upside and downside rewards capped at £3 million, is intrinsically unfair and fails to provide sufficient incentive for superior performance. Moreover, the absence of a baseline assessment process exacerbates the problem by introducing uncertainty and unfairly exposing NIE Networks to the risk of incurring penalties without a clear starting point for evaluation.

An asymmetrical approach to upside and downside rewards would be more equitable, with greater potential for positive rewards than penalties. This would better align with the objective of incentivising excellence while mitigating disproportionate risks for NIE Networks. Additionally, establishing a baseline assessment process before implementing the reward structure is essential to ensure fairness and transparency in evaluating performance.

Drawing on experiences from similar regulatory frameworks, such as the Incentive on Innovation Outputs Scheme (IIS) in Great Britain during ED1, an asymmetrical cap and collar approach proved highly effective in driving substantial performance improvements. Notably, the asymmetrical structure allowed for greater potential rewards than penalties, incentivising network operators to excel while mitigating the risk of disproportionate penalties. It's worth noting that this asymmetrical approach was implemented initially, and it was only after performance had been benchmarked and evaluated in ED1 that a symmetrical cap and collar was introduced for ED2.

This historical precedent underscores the effectiveness of an asymmetrical reward structure in promoting innovation, efficiency, and overall performance within regulated industries. By providing stronger incentives for positive outcomes while limiting potential downsides, regulatory frameworks can better align with the goal of driving continuous improvement and value creation for consumers. Therefore, adopting a similar asymmetrical cap and collar mechanism for NIE Networks' evaluation process would not only be fairer but also more conducive to achieving long-term benefits to energy consumers.