1. Essential need for anticipatory investment

1.1. The 80% target of renewable energy in Northern Ireland is a stretching one and can be completely undermined by poor response times to connect generation and demand. It is widely accepted that anticipatory investment is essential.

1.2. If progress is to be made towards achieving net zero goals, then we believe we need an appropriate level of certainty to invest ahead of shorter-term need in RP7. Many of the uncertainty mechanisms proposed in the DD include the ability to claw back allowances if certain conditions are not met, or extensive up front application processes.

1.3. Unduly onerous claw back mechanisms create uncertainty regarding cost recovery discouraging investments which could be efficiently advanced today to prepare the network for future needs. This can cause delays or deferrals, which may in turn result in higher ultimate costs to customers if or when the investments are made.

1.4. There are virtually no realistic modelling scenarios which do not result in a large increase in the electricity consumption over the medium term.

1.5. The use of claw back against short term volume drivers for primary network reinforcement and secondary network reinforcement are ill advised at this point. The attempt to maximise efficiency through this timing of what is very likely to be essential investment undermines he principal of anticipatory investment, leads to uncertainty with resource allocation to deliver and, as a whole will be detrimental to customers over time.

1.6. Similarly the additional conditions proposed for D5 projects undermine the importance of timely investment.

1.7. Greater certainty should be given to NIE Networks to invest in the network and more responsibility to ensure much shorter connection times for customers in all major population centres and areas of economic activity.

2. General points

2.1. The focus of the Energy Transition in NI is presently on achieving a target of 80% renewable electricity by 2030, meaning the ongoing issue of oversupply is likely to be heightened. However to achieve the target set, the priority of the electricity network owner should therefore be facilitating renewable generation connecting to the network, and the speed of medium-large scale demand connections. We see this as facilitating factories who are able to electrify their processes in an effort to decarbonise, or facilitating fast charging EV infrastructure at key public points and workplaces which can help to provide the required demand side flexibility to manage periods of oversupply. Connection of aggregators may also provide flexibility here through pulling distributed demand together. We therefore see value in placing a focus on anticipatory network investment to prepare for the surge in demand that is likely to take place, as any increase in renewable generation will only be made useful if there is sufficient demand connected to the network.

2.2. A concern we have is the focus directed at the heat pump roll out and the assumptions made, which may not be realistic as they are not presently supported by policy and do not reflect the current state of play on the ground. In our view, a full review of a heat strategy for NI needs to be carried out. This is to ensure that assumptions made are realistic and not ideologically led. We anticipate a low carbon heat consultation from DfE, to address the barriers to decarbonising NI's heat supply as well as informing the required policy for creating a realistic pathway to achieving this.

3. question posed by NIAUR

NIE based its central estimate of new demand on the connection of **300,000 electric vehicles and 120,000 heat pumps by 2030.** UR has asked for feedback on whether this is a **reasonable assumption, or should it be higher or lower**?

4. Heat pumps

4.1. GB operates an extensive incentive regime currently up to £7,500 per installation, has a formal policy on heatpump adoption and set testing targets. The incentive regime is well established having started in May 2022.

4.2. Data on the installation rates are published by the certification authority MCS on the following website: https://datadashboard.mcscertified.com/InstallationInsights . In the calendar year 2023 GB installed 39,270 heat pumps in a country of 28.2m households. This is a 0.14% conversion rate. **If applied to Northern Ireland this suggests an annual rate of just over 1,000**, in an environment with supportive policy, an already established generous support scheme and firm government targets.

4.3. An alternative source of data is the official statistics published on Gov.uk. the latest being here: Boiler Upgrade Scheme statistics: December 2023 - GOV.UK (www.gov.uk) .

4.4. From May 2022 to December 2023 Wales had received 1,086 valid voucher redemptions, So about 60 a month. Given Wales has 1.4m households compared to 0.8m in Northern Ireland, **a pro-rata view would put annual heatpump installation at about 400,** if there were a similar uptake with this level of grant.

4.5. The average of 22,000, where there is no grant support and no set target, is clearly too high.

5. Electric Vehicles

5.1. At end of June 2022, there were 1.25 million registered vehicles in NI, of which 11,476 were Ultra-Low Emission Vehicles (ULEVs).

5.2. Total new car registrations in Northern Ireland in 2023 were 45,363 and in 2022 38,381.[1]

5.3. To hit 300,000 electric vehicles in 2030 we would need to be averaging c36,000 EV registrations a year, over 80% of all new registrations. We believe some of the car dealership bodies in CBI would have a good insight into growth rates. In GB Plug in Hybrids (PHEV)and fully electric vehicles (BEV) combine to about 23% of new car sales[2], Northern Ireland is likely to be slightly less. The 300,000 is therefore clearly too high.

5.4. Manufacturers have obligations based on penalties. From 1 January 2024, 22% of all manufacturers' new car sales in the UK must be ZEVs, the figure rising to 28% in 2025, 33% in 2026, 38% in 2027, 52% in 2028, 66% in 2029, 80% in 2030. EV Car sales are not hitting these targets, with January 2024 BEV's at 14.7% of sales. The addition of the PHEV's however does make these numbers more realistic.

5.5. Whilst some manufacturers have decried this as unachievable, and Northern Ireland may be below UK averages, this would be prudent basis for network planning, adding some 130,000 to the existing electric vehicle numbers.

5.6. To improve accuracy in the planning it would be important to know how NI registrations compare to GB and in particular the take up rates of EVs under the Motability scheme.

6. Impact on priorities

6.1. In the near term the vitally important part of network development should be to facilitate larger scale generation and demand points. The key risk is that the poor lead times for connecting demand points, say major EV fast charging hubs, or factories looking to electrify processes continues whilst network design is targeting domestic loads which, in the case of heat pumps, are unlikely to manifest in this timeframe if ever.

6.2. It should be noted that the established target in the energy strategy is the high renewable energy target as a percentage of end use. The department is actively pursuing offshore wind to achieve this. The anticipatory spend should clearly be to allow this energy to be landed and taken to the major demand centres. Anticipatory investment in this area is fully warranted as the costs of any constraints not alleviated will be very substantial.

[1] NI's most popular car of 2023 revealed as sales surge | BelfastTelegraph.co.uk
[2] UK new car registration data, UK car market - SMMT