

27 November 2013

Competition Commission
NIE Price Determination
Victoria House
Southampton Row
London
WC1B 4AD

Dear Sirs,

Ulster Farmers' Union response to Competition Commission Provisional Determination on Northern Ireland electricity price control – November 2013

The Ulster Farmers' Union (UFU) is the largest farming organisation in Northern Ireland representing over 12,500 farming families and we welcome this opportunity to respond to the Competition Commission Provisional findings on Northern Ireland electricity price control.

Being the largest representative of the rural economy in Northern Ireland, our members will be directly affected by any decisions arising from this determination.

The findings will impact upon Northern Ireland farmers and landowners on three counts;

1. Farm businesses are direct customers of NIE T&D as their businesses consume large and significant volumes of electricity every second of a working day.
2. NI farm land incorporate and facilitate much of NIE T&D's infrastructure and capital equipment (lines, poles, substations etc) and our members receive a wayleave payment in many instances.
3. Farmers and land owners are the main generators of small scale renewable electricity in Northern Ireland, mainly through wind turbines.

Core Network Investment

- **Project D56 – Network Resilience (Ice Accretion)**

Network resilience was tested to the extreme in March 2010 by the ice accretion on the 25mm² lines on the 11kV network, it was only through good fortune that disruption was not greater, however, should this weather event happen again we might not be so lucky unless the resilience of network is improved.

With c.40,000 farms throughout Northern Ireland, our members are heavily dependent upon the 11kV network and lines. In Northern Ireland there is approximately 3.5 times more overhead line per customer than the average Distribution Network Operator on the UK mainland, which illustrates the importance of a resilient and reliable electricity network being available.

Impact of ice accretion upon 25mm² conductors on the 11kV network, hence NIE wished to replace a small section with 50mm² conductors

We wish to draw your attention to and comment on a specific paragraph;

9.33 The UR told us that NIE had not provided any information on the planned outage impact; that it had not done anything to look at whether customers felt this was valuable or not; and that it had not done any cost benefit analysis (CBA) for a pilot project which was forecast to cost £35 million.

The UFU disagrees with the first part of this statement.

NIE did approach the UFU in our capacity as the largest landowner representative in Northern Ireland. Since it was our members who would be adversely affected by any down-time caused by network failure due to ice accretion, we voiced support for both the initial submission for £127m but also any pilot project in our submission to the Competition Commission on 18 July 2012.

UFU Response – We are disappointed that the CC has turned down the NIE request for a pilot project in their provisional findings. In light of the information provided, we once again wish to voice our support for a pilot project to look at 11kV network resilience.

- **Project D48 – 11kV Network Performance**

The capacity of the 11kV network is already under strain due to the integration of small scale renewables. The UFU believes that this should be taken into consideration in the context of network performance. Namely, if there is pressure already on the network, this could have an adverse impact upon the performance.

When the CC says that this project “was targeted at improving service quality to a relatively small group of rural customers” the UFU would draw attention to need for all rural dwellers to have access to a well-performing electricity network and many farmers could be included in this “small group” and their business (and wider community) would benefit from improved network performance.

UFU Response - We are disappointed that the CC determined that “this investment was not so compelling that they should allow it” and continue our support for NIE’s proposal on behalf of the rural dwellers would benefit from improved network performance.

- **33kV network installations for small-scale renewable generation**

The provisional findings describe this as expenditure to cover network reinforcement, caused by the increase in small scale renewable generation.

Since the CC provided to decision on this, further submissions where invited from the parties as to how this issue is best dealt with and the UFU welcomes the opportunity to do so.

- **UFU Rationale for reinforcement work on 33kV network**

To date in Northern Ireland, a large proportion of our members have connected/applied to connect small scale renewable technologies (embedded generation) to the 11kV network, including wind turbines, AD units, solar PV and hydro. This has led to increased 11kV connection costs along with a requirement for 33kV reinforcement work to facilitate generation export from the 11kV network to the 33kV network.

High connection charges are only a part of the problem. There is a structural problem which we believe can be addressed in the context of price control.

Up until earlier this year, there was an understanding that parts of the 11kV network were subject to capacity problems. However, the magnitude of the problem only became clear when NIE confirmed that the capacity problems extended to the higher voltage 33kV network.

The UFU notes that the connection charges which small-scale generators pay to connect to the electricity network do not currently cover this reinforcement work.

The potential for capacity limitations on the 33kV network arise when significant output from small scale generators coincides with minimum electrical demand on the lower voltage network to the extent that significant power flows are exported from the 11kV network on to the 33kV network. These flows then add to the output from 33kV connected wind farms, with capacity limitations arising where the aggregated power flow exceeds the rating of the 33kV network. The main period of risk is therefore during the night at times when generation output is maximised under windy conditions.

In certain geographical locations there remains little spare capacity for connection of further generation without investment in the local 33kV network. The 33kV investments required are wide ranging and include installation of voltage control equipment to enable reverse power flow at the primary substations, replacement of older transformers and/or tap-change equipment which cannot accept reverse power flow, and in some cases, rebuild of the upstream 33kV networks.

NIE had to approach Utility Regulator seeking approval on the cost recovery mechanism to be applied for certain 33kV investments in May 2013. Whilst awaiting a decision, NIE had to issue “conditional offers” to applicants wishing to connect to the grid in the affected areas. The connection of these generators is therefore conditional on Utility Regulator approval, which is a time consuming process and creates a costly delay for small scale developers.

On 25 October, £2.5m of investment was announced to facilitate the reinforcement of a number of key primary sub stations.

With the publication of a heat map denoting saturated areas where significant 11/33kV network upgrade may be required to facilitate generation export, NIE have admitted in many instances it could remain cost prohibitive despite the recently announced investment. Many in the industry believe that whilst this investment is welcomed, it was simply a mere “sticking plaster” and instead substantive investment is needed on the 33kV network to facilitate small scale renewables.

NIE have indicated that to increase capacity further would require more significant further investment; NIE initial estimates are in excess of £3m and depending on the solution and there are best placed to set out what this might be. NIE expect this to take between two and four years to implement.

“Conditional offers” are creating further uncertainty at a time when applicants are under pressure to connect to the grid in terms of capital commitment relating to the physical equipment.

UFU Response - In their submission, NIE estimated that this reinforcement work could require an “ex-ante allowance” of £30m. The UFU’s first-hand experience which has been detailed supports the need for such an “ex-ante allowance” and are therefore calling for this to be considered to ensure there is adequate headroom on the grid forward. .

- Research and Development

The UFU are very disappointed that R&D has not been adequately addressed. The current connection problems experienced on the lower voltage line has forced landowning generators to look at alternative ideas.

Earlier this year, the Northern Ireland Science Industry Panel (Matrix) published a report about how better use could be made of the existing grid through Energy Storage, Demand Side Management how Northern Ireland could work as part of an Intelligent Energy System.

By creating regional DSU's (incorporating on-farm renewable technologies) these could be incorporated into the 212 33kV community sub stations in NI. By doing so, the need for solely ROC support to make a project work will diminish and landowners will have an alternative way of connecting to the grid.

This (and similar projects) will only work if supported by a buy-in from NIE (and other decision makers) in the form of a commitment to enhanced research and development.

UFU Response - The UFU view this an opportunity missed in terms of both job and knowledge creation. Matrix stipulated that this is an opportunity to create a central of excellence in Northern where other countries could learn from our expertise.

- **Wayleaves**

The UFU acknowledge the CC decision in relation to wayleaves and we will continue to work closely with NIE on any future developments which may affect our membership.

There is a difficult trade-off between the cost of wayleave payments to landowners, administrative costs of the wayleave payment process and benefit of landowners goodwill. However, our responsibility is to ensure that our membership receive the best outcome possible in relation to wayleave payments.

If you have any queries do not hesitate to contact me.

Yours faithfully,

Chris Osborne
Senior Policy Officer