



By email to: kevin.oneill@uregni.gov.uk

RESPONSE FROM SMART GRID IRELAND TO DRAFT DETERMINATION ON RP5

Dear Mr O'Neill

Smart Grid Ireland welcomes the opportunity to provide our considered response to the draft RP5 Determination issued by the Electricity Regulator, 19 April 2012. Our response focusses on the impact of the proposed decision to disallow significant amounts of strategic investment in the Northern Ireland grid infrastructure.

In structuring our response we have identified key areas of concern with specific headline summaries against each, with an offer to engage in further supportive discussions with the Regulator to develop what we regard as a more positive and strategic investment outcome for Northern Ireland Electricity network. Our main concerns are highlighted as follows:

1. Misalignment of Determination with the Strategic Energy Framework for NI

The SEF stated that DETI viewed the challenge for Northern Ireland's energy future in the following terms;

1.1

Challenge (SEF page 23)

To provide Northern Ireland with a robust and flexible energy infrastructure that will support economic development, facilitate an increasing level of renewables and provide security of energy supply to 2050.

Smart Grid Ireland cannot find any evidence that this strategic policy imperative has been given any consideration in the "minded to" proposals setting out the view of the Regulator towards this critical investment need. To disallow the entire provision of £291 million in the NIE proposal is at odds with the policy intent of DETI and is also unique when compared to what is happening throughout Europe. As an example, both the Italian and Portuguese regulatory authorities recognize



the impact of smart grids by offering a premium of 2% and 1.5% respectively on the agreed RAB rate of return for those investment plans directed to creating smart grid infrastructure.

1.2

Smart Grid (SEF page 21)

Building a smarter grid in Northern Ireland will facilitate the transition to a low carbon economy by changing the way energy is supplied and used. Integrating more information and communications technology coupled with the associated use of active, or smart, devices such as smart meters in homes will facilitate energy efficiency, improved services for consumers, reduced costs and carbon emissions and improvements in retail competition

There is a body of empirical evidence which validates the case for national energy planning to include specific provision for development of a smart grid infrastructure yet the determination is silent on this point. The sole view expressed in the determination is that of a “follower” philosophy, presumably under the mistaken belief that a “no risk” approach will benefit the consumer despite the evidence to the contrary.

2. Absence of support or proposals for undertaking Smart Grid pilots

At the request of the Minister, and supporting her statement in the SEF, Smart Grid members assisted DETI in the preparation of a detailed plan for a smart grid pilot. This took the form of sharing relevant domain expertise with NIE so they could initiate a (£3.1mio) pilot which would demonstrate a range of technology functions and the use of smart meters as an intelligent platform for managing the distribution network.

This proposal was rejected on the basis that Northern Ireland already had a pilot underway. This decision ignored the fact these were two technically different proposals and both essential in creating a base line for technological development longer term. In fact the current pilot project underway is extremely limited and is low cost at £200K apart from the fact it should not be assumed that technology applications can be replicated from one grid to another but each has its own unique technological and operating requirements. This example highlights the difference between the progress being made in the UK under the Ofgem



regulatory regime where it has been recognized that the transition to low carbon required regulatory intervention and stimulus (hence introduction of RIIO). Whereas this Determination has a single focus on cost control and continues a narrow RPI-X approach to a multi-faceted future energy challenge.

The European Commission Joint Research Centre document published earlier this year (JRC 65215) stating that the total budget of named projects already underway was over €5bn and that in their view this was only the beginning of the smart grid transition. The EU quotes conservative estimates to quantify smart grid demonstration investments by 2020 at a minimum of €56bn.

The NIAUR Determination covers the period up to 2017 yet no provision is being made for Northern Ireland to invest and develop its skills and play a part in the this new technology and renewable energy supply revolution.

3. Low Carbon Network Fund – lack of funding for innovation in Northern Ireland

The Low Carbon Network Fund initiative by Ofgem is held out as an exemplar to utilities and regulatory authorities throughout Europe.

Extract from Ofgem letter 27 Nov 2011

As part of the last electricity distribution price control, we established the £500m Low Carbon Networks (LCN) Fund. The aim of this fund is to provide Distribution Network Operators (DNOs) with the opportunity to obtain funding to trial innovative solutions to the challenges that they face. Such trials are required to enable DNOs to understand how they can meet the changing requirements of consumers and generators as Great Britain (GB) moves towards a low carbon economy. The learning gained from these trials will be disseminated to all DNOs and will be widely available to other interested parties to help them make the changes required in a timely and cost effective way. Learning from the trials will help to feed into the Smart Grid Forum which is jointly chaired by Ofgem and the Department of Energy and Climate Change (DECC). Results from the trials will also inform our development of the regulatory framework for networks and help DNOs to prepare well informed business plans for the next electricity distribution price control (RIIO-ED1).

Northern Ireland should be able to utilize a similar initiative to encourage innovation in the development of the robust grid infrastructures that can cope with the transition to a low carbon economy with the capability to allow integration of the planned growth in renewables.



The view in the Determination is that there will be minimal load growth. This ignores the fact that there are already grid weak points where the localized grid cannot and will not be able to accommodate or facilitate the connection of the planned investment in wind farms and other low carbon electricity supply sources. Had NIAUR initiated a similar programme to the LCNF there is no doubt they would have received innovative working proposals to test the range of possible solutions to these critical problems.

4. Grid modernization

The Determination relies on a trend analysis of past investments as a predictor of what is required for the future. Yet it is an accepted fact that the grid network is ageing and that replacement is non-linear. Investments must be made ahead of the need otherwise the consequences will be catastrophic for Northern Ireland. The investment profiles in distribution networks across the developed world are remarkably similar as the priority focus will see the majority of funding allocated to the renewal and upgrade of distribution automation assets.

DNO's need the capability to deliver integrated operations capable of allowing the user the maximum flexibility. However NIAUR's determination, by absence of any allowable financial provision, leaves the Northern Ireland consumer vulnerable to the consequences of a lack of smart grid investment and thus unable to derive the benefits which will be enjoyed by consumers in other countries.

5 Economic impact

Charles Hendry MP, Minister of State for Energy launched a Smart Grid Great Britain report on 23 April 2012 (Smart Grid: A race worth winning?) in which the Ernst and Young analysis estimated the savings from the deployment of smart grid could amount to a positive NPV of £19bn (2012-50) starting now.


Smart Grid Ireland is concerned that in spite of the NIE proposal taking a forward view to begin this process, the Determination takes a view more aligned to "business as usual" as opposed to essential and strategic economic investment considerations. This will deprive Northern Ireland industry and the economy of the potential supply chain benefits and will also impact adversely on the



development of a smart grid skills base as a key enabler of potential inward investment.

Smart Grid Ireland is a private sector collaborative network with a membership that incorporates a range of significant global companies including, General Electric, Vodafone, BT, Ericsson, Qualitrol, SSE, Silver Springs, Oracle, IBM, Gridline EU etc. It is our experience operating internationally that the costs and security of energy supply will become an ever more important factor in inward investment considerations.

Signed on behalf of Smart Grid Ireland: Paddy Turnbull, Chairman.

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