

# Response to

Consultation on Electricity Connection Policy to the Northern Ireland Distribution System

10 January 2010



## Introduction

SSE Renewables welcomes the opportunity to respond to the consultation reviewing the Electricity Connection Policy to the Northern Ireland Distribution System. As the paper notes, "the…nature of connections to the distribution system have changed in the recent past and this trend is expected to be sustained as a result of government target and incentives for renewable and embedded generation". Given this changing context, it is indeed apt that the Utility Regulator is initiating this review of policies and principles for the connection charging process. Our response follows the structure presented in the consultation paper.

# Section 3: Current charging methodology in the Statement of Charges (new domestic and smaller business connections)

We support the proposal to remove the 40% subsidy for this category of customers. Having achieved the aim of the subsidy which, as stated, was to assist in the initial electrification of Northern Ireland, it is imperative that connection charges to these classes of customers are moved to a cost-reflective basis. As noted this would "encourage connections at the points of the network that require the least construction of new assets".

Given the changing nature of the electricity network, it is important that resources are for the most part directed at elements of greater systematic importance. The focus with the electrification mandate was on growing load on the network. That objective has at this time gained sufficient momentum to proceed under its own steam. The new imperative for the network lies in achieving greater integration of renewable and embedded generation.

## Section 4: Treatment of Domestic connections of significant cost

The Utility Regulator outlines its view that the cost of connecting new premises "to the distribution system should be factored into the overall cost of the building and that cost of connection should be paid in full". This only represents prudent economics and is the responsible treatment to apply; property developers definitely need to balance construction costs against the costs of connecting to the distribution system. Adopting this policy should, as much as is possible, align property development with that of the electricity infrastructure.

For the avoidance of doubt, **yes** we would consider full reflective connection cost charges as an appropriate locational signal to future developers, which will ensure balanced decisions about the true development costs.

## Section 5: Connection costs paid by "vulnerable customers"

It is definitely imperative to develop a framework to be employed in the definition and identification of 'vulnerable customers'. Otherwise the term will remain vague, with ambiguities in its application.

However we are not certain that it is the role of the electricity network to determine the support for connecting to it for 'vulnerable customers'. While it will be useful to work with the other agencies to address this issue, it may best be addressed by mechanisms outside the connection charging framework, perhaps through some rebate process.

## **Section 6: Connection of micro-generation**

Government support for renewable micro-generation in GB is largely predicated on complimentary roles such technologies have to play with other large scale renewable energy technologies, in meeting mandated targets. If similar support is to be considered for NI, such should at the very least be based on the same terms. However giving the different characteristics of the electricity systems in GB and NI, it is unlikely that such complementarity will obtain.

The observation of the consultation paper that "large scale grid code compliant renewable generators might have to be curtailed in order to allow micro-generators to operate" works counter to the purpose of micro-generation in contributing to meeting government targets. Substituting less efficient generation in the mix clearly is not prudent dispatch practice. In addition, as such generation doesn't have to be renewable, the carbon emission reduction targets aims may be undermined rather than helped.

Our view is that non grid code compliant generation, essentially micro-generation, if excessive, will put an unfair burden on more efficient types of generation including WFPS. We believe the amount of non-grid code compliant micro-generation should be capped. Alternatively a more 'natural' way to provide for the development of micro-generation would be to limit the subsidies afforded it. Already, as the consultation notes, the support to this form of generation has already being improved by the recent increases in incentives through the Renewable Obligation mechanism. Hence we believe that sufficient incentivisation at the right level already exists for micro-generation.

## Section 7: Rebates for generators and customers

We consider it appropriate that longer timeframes for rebates for shared connection assets are appropriate. Specifically we would suggest a two-tier rebate profile; ten (10) years for demand customers and the asset lifetime for generator customers. Due to the high volumes of demand customers, administering rebates over very long periods may have drawbacks such as the creation of long backlogs, hence our suggestion for 10 years. However for generators, where the numbers are relatively insignificant in comparison, this should not be the case.

Generator connection charges have increased significantly in recent years. As a result a robust facility to rebate generators will become increasingly important to incentivising renewable generation onto the network. While the paper suggests a rebate horizon of 10 years for all customers, our view is that a rebate horizon over the lifetime of assets is more appropriate for generators; in some cases this period could be 45 years, a significant length of time that warrants the reallocation of value to the initial customer where such value arises. In addition adopting a timeline linked to the lifetime of the project would lower the incidences of early connections being burdened with high connection costs.

Furthermore we are of the view that, given the context of the Single Electricity Market, the NI rebate policy should be harmonised with the prevailing policy in the Republic. The equivalent policy in ROI states thus:

"Distribution assets – rebates will be offered for 45 years (regulatory life of distribution assets). This rebate timeline will apply to all generators who funded distribution assets since the beginning of Gate 1 (2005)."

Finally, while the consultation paper suggests that this proposal will be applicable from a future date, we further view that the proposal should be made applicable from 2005, as obtains in ROI.

#### Section 8: The definition of 'connection assets' and associated costs

Moving to a "semi shallow" connection policy will result in reducing the upfront connection costs for generators. This would be a welcome development that would encourage connecting generators. By implication we accept that this will result in the introduction of Distribution Use of System charges for generators. This however should be a beneficial trade-off.

However we must point out that as the process to date has assumed that generators to date have paid the full cost of connection assets, under the current definition, these 'pre-existing' generators should not be liable to any introduced use of system charges for the distribution system. This would be double charging. A clear methodology for calculating the Duos charges should be developed and consulted upon.

## **Section 9: Timing of Connection Offers and Connections**

We are pleased that the issue of timing of connection offers is being consulted upon, as it has become a significant issue in the past 2 years. There is without doubt a lack of NIE resources in this area and issuing of connection offers with agreeable terms has been very slow. It is rare to receive an acceptable quotation offer within 3 months of submitting a wind farm application and has instead been taking anything up to 1 year. It is vital to receive as much information as early as possible regarding the connection option and cost estimate. The grid connection timelines and costs have become one of the key risks for wind farm development and earlier certainty in this area is required. SSE believe that an approved template or standard form of connection offer should be devised. This would increase the speed of issuing of offers and avoid any ambiguity issues.

A wind farm developer needs to be able to assess, early, the risks associated with overhead line/underground cable routes, substations and other grid reinforcement works that are required

as part of the connection. Early engagement with key stakeholders in the area of the connection route is something wind developers are looking to improve upon. It has been suggested in recent publications that timelines associated with overhead lines can be up to 7 years – this is an unacceptable timeline for a wind farm connection if the timelines kick off once the wind farm has received planning permission.

NIE should be actively suggesting to developers that advanced work packages are available to put grid connections through the planning process. SSE Renewables would most definitely be in favour of paying for an accelerated service from NIE.

It is also imperative that TUoS agreements are issued at the same time as connection offers, as developers need to understand the potential constraint levels for their connections.

Finally, we are of the view that it will be appropriate to incentivise NIE to reduce timelines for both the planning and for the construction stages. While we appreciate that some aspects of the planning process are not directly within the control of NIE, NIE should accept that response times and follow up meetings should be prioritised. One way of addressing the difficulties with incentives and control would be to allow customers take on responsibility for planning and construction of connections, in the form of contestable builds.

## Section 10: The treatment of Charges for Connecting Groups of Generators

SSE Renewables welcomed the proposals for connecting groups of generation projects to the distribution system and look forward to its adoption. However we have a concern regarding the size of transformers to be installed at the substations. 60 MVA rating has been proposed as being the standard rating for these transformers. Our view is that 60 MVA does not provide appropriate sizing for clusters; where additional connection is required within a cluster, the incremental cost for adding another transformer will be significantly greater than the incremental cost for installing a higher rated transformer in the first place.

Thus careful consideration should be taken when selecting the MVA rating of 'cluster' transformers. We would suggest that NIE should consider the 90 MVA rating as the standard for

transformers to be installed at cluster substations. Our recommendation is based on the fact that the incremental cost for a 90 MVA rated transformer over one of 60 MVA rating is marginal.

## Section 11: Other issues

## 1. Operation and Maintenance (O&M) Costs

At present generator connections are charged 2% for O&M of the shallow connection assets. This charge is capitalised and included in the connection cost, which amounts to ~23% of the asset costs contained in the connection offer. Developers have started to request that this charge is applied on an annual basis, NIE stating that this will amount to 2% of the asset cost.

This 2% also covers the cost of the SPS and Telecoms, which we feel is excessive, considering these devices require very little maintenance. This puts an unfair financial burden on the generator and needs to be reviewed.

On this basis we now call for a detailed review of this policy. Our view is that O&M charges could be calculated for each standard piece of connection equipment to provide the transparency required.

## 2. Grid Code and Trading and Settlement Code Costs

Costs associated with Grid Code and Trading and Settlement Code compliance should be clearly identified and explicitly communicated to customers. It is our view that these costs should be identified in the Statement of Charges for connection to the NI distribution System.

#### 3. Contestability

Contestability at both transmission and distribution level is required immediately. Wind farm developers should be entitled to take control of the delivery timelines for their shallow assets. We have been contesting shallow connections for transmission connections in ROI for over 5 years and are very satisfied that the assets can be delivered in a timeline that suits the project and to a quality that is acceptable to the TSO/DSO. Contestability at a distribution level is now also available in ROI. Contestability is also fully approved in GB.

We would also request that a hybrid approach similar to that in ROI be implemented whereby the planning permission and wayleaving is carried out by NIE and the construction is carried out by the developer.

To discuss this document contact:

Emeka Chukwureh emeka.chukwureh@sserenewables.com