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10th January 2011

Electronic submission to:

Mr. Albert Shaw (albert.shaw@uregni.gov.uk)
The Northern Ireland Authority for Utility Regulation,

&

Ms. Sarah Friedel (sarah.friedel@uregni.gov.uk)
The Northern Ireland Authority for Utility Regulation

Re: DW Consultancy Ltd's response to *'Consultation on Electricity Connection Policy to the Northern Ireland Distribution System'*

Dear Sir and Madam,

DW Consultancy Ltd. (DWC) welcomes the Utility Regulator's publication of this current consultation paper titled *'Consultation on Electricity Connection Policy to the Northern Ireland Distribution System'*, and also the opportunity to provide an opinion on the wide range of important issues with which this consultation deals with. With the Government target of 40% of electricity from renewable energy by 2020 and the growing complexities associated with grid connections there is a need for the development of comprehensive connection policies. DWC welcome this consultation as the starting point for the development of these polices. Substantial discussion and consultation will be required between the regulator, system operators and industry participants to develop robust policies that can both safeguard the consumer and provide an adequate framework for the efficient delivery of generator connections.

In the first instance, we support the positions outlined by the Northern Ireland Renewable Industry Group (NIRIG) in their response to this consultation.

In addition to our support of the NIRIG position on this consultation we would also like to note the following:

Connection of micro-generation:
The Northern Ireland (NI) electricity network and system is becoming saturated at times with wind generation. Substantial numbers of micro and small wind generation could unduly increase the level of constraint and curtailment for controllable wind farms. This would particularly be the case if large number of small wind turbines (50kW to 500 kW) were to connect in areas that are already experiencing constraints. A form of control for these sizes of generators could be introduced, for example with the use of a Nulec Recloser. Although cruder than a TSO RTU, this device has a lower cost and could be primarily used during transmission and distribution network maintenance periods.

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Alternatively constraint and curtailment could be shared across controllable and uncontrollable generation through the market settlement system.

Rebates for generators and customers:
With more generators connecting through clusters, and therefore sharing assets, it is appropriate that there is a detailed **Rebate Policy**. Without a Rebate Policy some generators could connect using connection assets paid for in full by other generators. The time period for rebates has to consider the lifespan of connection assets and the administration burden of holding records on connections for the rebate period. Generator connection assets have a typical lifespan of 50 years. DWC propose a rebate period of 45 years for distribution assets and 50 years for transmission assets. This is in-line with the policy for rebates in Ireland, see CER10085(g) page 25. The administration burden would be reduced if only generation assets had a rebate period of this length. This is reasonable as only generators pay for shallow connection assets in full and the number of generator connections and therefore records are manageable.

Furthermore, DWC strongly believes that if a wind farm project is terminated at any point prior to energisation by a developer, then NIE should endeavour to refund any connection charges that have not been committed at that point by NIE. If subsequent generators use the capacity on shared assets made available by the termination of the wind farm's offer, then the contribution towards the shared assets should also be rebated. This scenario should be included in the new Rebate Policy.

Definition of "connection asset" and associated costs:
DWC welcomes the regulators proposal to move towards a shallow connection policy for distribution connections. As a shallow policy is already in place for transmission connections it would appear discriminatory if this policy was not adopted for distribution connections. It would be helpful if later in this process greater detail is provided for consultation with industry on the rule-set for determining between shallow and deep assets.

Generators greater than 10 MW currently pay ongoing TUoS charges towards the cost of operating, maintaining and developing the transmission system. As the majority of deep reinforcements for windfarms are at transmission level (110 kV) it does not seem necessary to introduce a new DUoS tariff for generator connections.

Timing of connection offers and connections:
DWC view the current timescale of three months for the preparation by NIE of a new connection offer as appropriate. Any modifications to the offer should be issued in a much shorter timescale depending on the nature of the modification. With the increased number of generator connection applications, and the complexity of the connection methods, there is the requirement for additional resources in this section of NIE. The resources in this team are also involved in the ongoing liaison with developers during the pre-construction and construction stages. This also increases the burden on this section as there are an increasing number of on-going projects. NIE resources from this team will probably also be required in the development of the connection polices and documentation.

DWC requests that an estimated programme of works for the delivery of the connection, including the main milestones, is included with the connection offer.

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The timeline for the delivery of connections are a concern for DWC. It is important as the number and complexities of connections increase that NIE have sufficient resources on the projects delivery team. This also applies to the delivery of deep reinforcements. Greater information and interaction with wind developers is required on the delivery programme for deep reinforcements.

The introduction of contestability will also improve timelines for the delivery of shallow connection assets.

DWC support the proposal that NIE are incentivised for the timely delivery of connection offers and connection assets, both shallow and deep. If governments renewable targets are to be achieved by 2020 it is important that both system operators are appropriately incentivised in all areas associated with the connection, network reinforcement and operation of renewable generation.

It is also important that NIE should provide the option of advanced works for the consenting of cluster connection assets. This could improve the timely delivery of cluster connections. It is accepted that this may be at the expense of developers.

The treatment of charges for connecting groups of generators:
DWC has some reservation with NIE's proposals for a hybrid of option 3. The size of transformer to be used and therefore the denominator is not clearly specified in the NIE's proposals. 90 MVA transformers have already been proposed for a number of clusters. DWC would propose that a 90 MVA transformer be used as the default size of transformer unless there is clear justification that there is not the potential generation capacity in the area. Projects in the planning process should be considered when NIE is deciding on the transformer size.

The proposal that any new connection driving the need for a second transformer is charged initially in full for this asset appears excessive. DWC would propose that this asset should also be part funded by DUoS if there are other generation projects in the consenting process in the area that are likely to share the second transformer.

Operation and maintenance (O&M) costs:
The current standard charging structure and level of O&M charges is a concern for DWC. Developers should have the option of either a capitalised O&M cost as part of the capital cost in the connection offer or to pay for the O&M costs on an annual basis. DWC prefer the option of annual O&M charges as it is more in line with both the cash flows from the wind farm's revenue and the O&M costs incurred by NIE.

DWC does not believe it is necessary for developers to provide a bond where they opt for the annual charge. Renewable generation is now accepted government policy and wind turbines are proven technology. There is no sufficient risk of windfarms not operating for the lifetime of the connection agreement, to justify the additional cost of putting an O&M bond in place.

NIE currently charge 2% annual O&M. The same charge is applied uniformly even though there are substantially different levels of O&M required for the different connection assets. The level of charge

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seems excessive when compared to the average ESB Networks distribution O&M charge of 1.4% for 2010. The ESB Networks charges also include a greater contribution towards council rates. DWC request a review of the level of O&M charges, and that specific O&M costs are published for each type of connection asset.

Grid code and trading and settlement code costs:
DWC supports the transparency of all connection costs. The list of connection assets in NIE's charging statement should be expanded to include standard costs for all the principle connection assets for generators. The communication methods and cost for windfarms should be reviewed and consulted with the industry. This includes the communication cost associated with SPS schemes. Options other than fibre should be available. When possible, NIE and SONI should also share communication assets.

Greater alignment is required between NIE and SONI on timing of connection offers and agreements. The outcome of studies carried out by SONI should be included in the NIE's connection offers.

Contestability:
Contestability has been successfully used by windfarm developers in the UK and Ireland for the delivery of connection assets at lower cost and in a reduced timeline. It also reduces the resources required by system operators for the delivery of connection assets. DWC request that contestability is introduced in a reasonable timeframe in Northern Ireland, at both transmission and distribution level for generator connections.

Finally, we again welcome the Utility Regulators invitation to consult on these important issues, and we trust that the thoughts highlighted by DWC are valid concerns which will be given due consideration. Should you have any queries with any of the points raised herein, or should you wish to discuss any of these matters further, then please do not hesitate in contacting us.

Yours Sincerely,

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Chartered Engineer
For: DW Consultancy Ltd.

cc Ms. Doreen Walker DW Consultancy Ltd.