



Anthony Mungall
Electricity Transmission Team
Ofgem
3rd Floor
Cornerstone
107 West Regent Street
Glasgow
G2 2BA

AMEC
Power and Process Europe
75 Trafalgar Lane
Edinburgh
EH6 4DQ

Tel: 0131 625 2121
Our ref: RP/FCM/PT1

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By email: Project.TransmiT@ofgem.gov.uk

Dear Mr. Mungall,

Project TransmiT: electricity transmission charging – assessment of options for change

AMEC Power and Process Europe is part of AMEC plc and as a company we are doing business in the Western Isles. We welcome the opportunity to respond to this consultation as we are understandably concerned about the potential damage Project TransmiT could do to the Renewables Industry in Scotland if all available options are not considered carefully by Ofgem when it comes to transmission charging for the Scottish islands.

Whilst the *status quo* might be the preferred option of those generators located close to the electricity demand, *socialised charging* is still in our opinion the best option for the renewable energy sector in Scotland. However, it would seem that this option is no longer being considered under Project TransmiT so we have been asked to consider the implications of the *Improved 'Incremental Cost Related Pricing' (ICRP)* option which modifies the existing ICRP approach by taking into account volume-based load so that intermittent generators receive discounted charges.

Unfortunately the Scottish Islands (The Western Isles, Orkney and Shetland) are largely excluded from the main Project TransmiT analysis, and the indicative tariffs produced by Redpoint Energy fail to take into consideration that the TNUoS charges proposed for these islands (£67 per kW for the Western Isles, £52 per kW for Orkney, and £57 per kW for Shetland) which will then have the additional North of Scotland £10 per kW charge added to each of these figures, are prohibitive and are already impacting on the business plans of Renewable Energy developers to the extent that they are unable to commit to developments in or around the Scottish Islands. This lack of investor confidence is also highlighted in the reluctance on the part of developers to privately underwrite the cost of the Western Isles Radial Connector, without which no renewable generation of scale can take place in and around the Western Isles. Further, the Scottish Government's flagship £10m Saltire Prize challenge with the West of the Outer Hebrides being the preferred deployment area is prejudiced.

It should also be noted that the North of Scotland charge (presently £10 per kW) is liable to be doubled in 2016 as a result of investment in the proposed “bootstrap” subsea HVDC links reinforcing the Scotland/England boundary on both the east and west coasts of the UK.

We are therefore concerned that the economic viability of all renewable energy developments on the Scottish islands will be threatened by TNUoS charges being set at or anywhere near the elevated level being presently considered. We believe that the constraints of the TNUoS charging methodology itself which affords the system operator little or no discretion to spread the significant costs of new infrastructure across transmission users, is likely to significantly impede and discourage the desired level of renewable energy development activity on the Scottish islands.

We are concerned that under the Redpoint Energy analysis, the Main Interconnector Transmission System (MITS) terminates at Beaulay (near Inverness) a distance of 156km from the Western Isles, and all works between this MITS node and the Western Isles is classified as “local works” requiring full cost recovery and full underwriting by the developers proposing to use this link. The links required for the Northern and Western Isles are also not open to competitive tender (as would be the case for offshore wind farms which appear to be Ofgem’s considered methodology for their current treatment of the Scottish Islands) which would keep the costs to the consumer to a minimum.

The Redpoint Energy report also appears to not have taken into consideration the socio-economic benefits that renewable energy projects would bring to the Scottish islands. We refer to the findings of the socio-economic report carried out on behalf of Lewis Wind Power (LWP) by Halcrow in 2011 which predicts that £48 million of materials and labour could be sourced within the Western Isles during the construction phase of the proposed LWP wind farm; that the construction phase could directly support 196 jobs in the Western Isles and a further 181 in the rest of Scotland; that the majority of these jobs will be high value jobs associated with civil engineering, construction and manufacturing of towers; that overall, 792 jobs could be supported across Scotland by the construction and operation of the LWP wind farm, relating to direct, indirect and induced effects, and of these, 247 jobs would be based on the Western Isles; in addition, almost 25 jobs could be supported on the Western Isles relating to the community benefit, lease payments and compensatory payments to crofters in relation to direct, indirect and induced effects; and finally that the value of these funds accruing to the local community, discounted to a net present value, could amount to over £28 million over the life of the wind farm.

We would recommend that Ofgem take into consideration the Renewables Directive 2009/28/EC Article 16.7 which states: “Member States shall ensure that the charging of transmission and distribution tariffs does not discriminate against electricity from renewable energy resources, including in particular electricity from renewable energy sources produced in peripheral regions such as island regions and in regions of low population density”.

We would hope that Ofgem ensures that the UK is aligned with the European electricity market, both physically and through its energy policy, so that the UK can freely export its green energy to Europe in the future, particularly in light of the proposed European Network of Transmission Systems Operators (ENTSO-E) 10 year plan which will go out for public consultation in March 2012 in connection with the continent's investments in electricity infrastructure which will be "driven directly or indirectly by renewable integration concerns".

We believe that integrated transmission charging is needed for the whole of the UK since the grid is a UK asset. TNUoS charges for the islands should be based on a notional cost of transmission upgrade or extension of the UK network, rather than the actual capital costs of these new connections.

As requested we have answered the following questions:

Chapter 4 – Electricity Transmission Charging: Assessment of options for change.

Question 1: Do respondents consider that we have appropriately identified and where possible quantified the impacts of the Project TransmiT options?

No. The UK and Scottish Governments are committed to the Kyoto Protocol and EU Directives and should therefore be looking at all viable options to meet and exceed their 2020 targets. Further, the intermittent nature of generation from renewable resources should also be recognised in the charging regime, rather than basing the charges on installed capacity.

Question 2: Do respondents consider that there are additional impacts which we should take into account in the decision making process and, if so, what are these?

Yes. The current transmission charging regime penalises not only those private and public sector companies who are prepared to invest in large scale renewable energy projects in rural areas, where much of the potential is, but also penalises community groups, seeking to invest in their local communities via renewable energy, and who can ill afford the current or proposed transmission charges.

This charging anomaly needs to be addressed to allow all parts of Scotland the ability to compete on a more equal footing with communities elsewhere in the UK and to encourage investment in renewable energy generation through fairer charging. Scotland, and particularly the Highlands and Islands, has huge renewable energy potential but must have a fair access to the National Grid to allow for the transmission of this energy.

Question 3: Do respondents consider that we have appropriately identified the potential interactions of the Project TransmiT options?

Not totally. One of the options which Ofgem is currently assessing for the proposed “bootstrap” subsea HVDC links reinforcing the Scotland/England boundary on the east and west coasts of the UK, is the removal of the converter station costs for the calculation of the forecast tariffs. This option would seem promising as it would significantly reduce the tariffs for the Scottish islands. There is also a clear precedent for this approach in Ofgem’s treatment of the UK bootstraps. We would also ask Ofgem to consider that all tariffs in the UK system be calculated on the basis of a generic “Expansion Factor” approach based on a 400kV overhead line, rather than on the actual cost incurred.

Question 4: Do respondents consider that we have appropriately identified the likely impacts or consequences of these interactions?

No. Renewable energy has the potential to make significant contribution to the de-carbonisation of the UK’s generation mix and yet the proposed locational charging methodologies imposed on the use of the UK transmission system is at odds with this as it heavily penalises projects installed at the peripheries of the UK network (in particular the Northern and Western Isles) some of which are not currently connected to the UK transmission network. Further, the user commitments and liabilities associated with upgrading or building new transmission infrastructure needed to deliver renewable energy projects in the location where the resource is the best, will render such projects unviable from a commercial investment perspective.

Chapter 5 - Electricity Transmission Charging: Assessment of options for change.

Question 1: Do respondents consider that we have appropriately identified and taken account of the key sustainability issues?

No. It is clear from the work by carried out by Ofgem on “Project Discovery”, that a Green Transition or Green Stimulus package will best meet security of supply and renewable ambitions at least cost to consumers. However, the current arrangements for charging for access to the UK transmission network do not encourage investment in new renewable generating capacity. The incremental cost related pricing model used by National Grid in setting TNUoS tariffs is complex, and results in TNUoS tariffs that are extreme, volatile and unpredictable and not cost-reflective. Further they are distorting retail competition, are having an adverse impact on security of supply and are at odds with the creation of a wider European market.

Question 2: Do you think there may be long term and strategic benefits associated with the development of HVDC technology, in particular the treatment of converter station costs for links that parallel the AC network, which Project TransmiT modeling has not fully considered because of the timeframe of the modeling (i.e. 2030) and the limited nature of the bootstrap options?

National Grid has published forward-looking estimates of the transmission charges that would be leveled at generators in Scotland following the installation of the HVDC links, or "bootstraps" down the East and West coasts from Scotland to Teesside/Deeside respectively. The level of charges that comes out of the Improved ICRP model would more than double the transmission charges in the North of Scotland. Not only would this impact on new generation, it also hits existing generation.

Question 3: Do you have any supporting evidence for a different treatment of the converter station costs for the planned bootstrap HVDC options?

We believe that the UK Government's renewable and climate change goals can be achieved through the implementation of a simple framework consisting of a uniform commodity charge for the use of wider shared transmission assets along with a locational signal provided through a combination of a local connection charge and potentially a locational transmission loss factor , together with a fairer and more proportionate User Commitment.

In summary our concerns relate to the transmission TNUoS charges, which we feel are discriminatory and unsustainable. The process should provide some degree of flexibility with a cap on TNUoS charges which will encourage investment in renewable projects both on and offshore, inclusive of the potential island connections. We seek a level playing field throughout the UK and recognition of the scale of the carbon challenge facing the nation.

Yours sincerely,

A handwritten signature in blue ink that reads "Ronald D. Peddie".

Ron Peddie
Project Director