



# Fairwind Statkraft (Orkney) Ltd

Horries, Deerness, Orkney, Scotland, KW17 2QL

Tel: +44 (0) 1856 741267; Fax: +44 (0) 1856 741370;

Email: [dennis@researchrelay.com](mailto:dennis@researchrelay.com)

30.7.07

Robert Hull  
Director of Transmission  
Ofgem  
9 Millbank  
London  
SW1P 3GE

Dear Mr Hull

## **Zonal Transmission losses – Ofgem’s ‘minded to’ decision**

Thank you for the opportunity to respond to these later stages of the consultation process regarding Transmission Losses.

We note that Ofgem is now ‘minded to’ implement actions described in P203 and that this is a final opportunity to influence the final decision on the matter.

We note also that the Authority is mindful of its need to keep prices down for the consumer and to aid competition across the network. In the consultation document Ofgem drew attention to its need to make decisions in the light of environmental issues and the problem of having to generate more electricity that is actually used – due the transmission losses. The Ofgem position also maintains that imposition of increased charges, for losses, will not adversely affect the development of renewable generation

Though the analysis carried out by Oxera, in response to the question of interaction of the charges with TNUoS, suggested that a reduction coefficient of 0.5 should be used, we feel that the residual impact of transmission loss charging would still remain a significant factor despite this.

The table 4 (page 24 of the document) compares a CCGT in the South of England with onshore and offshore wind generation in the North (Scotland). It shows that the factor of ROCs would still favour renewable generation in the north compared to a CCGT in the South. This is only a working out of the purpose of the renewables obligation, however. The table does illustrate that a CCGT operating in the North would be at significant disadvantage.

It would have been interesting to compare like with like and show the impact of placing a wind farm in south and north.

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It is well documented that production capacities in England are more akin to parts of onshore Europe at around 30%, whilst much of Northern Scotland is at 40%. In Orkney and Shetland the capacity figures achieved by turbines which have been running several years now is 45-47% plus.

We have undertaken some calculations where we have factored in the Use of system charges, Proposed zonal losses, Business rates, Landowner payments and Community benefit model together with a construction cost factor of +15% for the Islands.

The model shows that there is already a considerable economic incentive to attempt to site windfarms in the South – which becomes more marked if the potential new zonal losses are factored in. The largest incentive (disincentive in North) is still the locational element of the TNUoS charging methodology – which becomes more significant as respective extremes of the positive and negative charging zones are compared. Charges for Transmission losses, if applied as envisaged, would only add to this disparity and would be a relatively minor factor in isolation. This factor, however, when added to TNUoS and increased construction costs takes the cumulative marginal costs ever nearer to the point where investment becomes too risky. This is especially true since TNUoS costs can be varied year on year and sufficient leeway must be included in business projections to allow for significant increases. The amount of risk is also not only dependent upon the measure of 1 risk but on the interaction of a number of risks. The addition, then, of an extra cost factor is then magnified by the risk of n+1 factors. This has not really been taken into account by the statement that “imposition of increased charges, for losses, will not adversely affect the development of renewable generation”. Whilst it may be true that it would not adversely affect investment in the South it would most definitely affect those in the North.

It is, however, the effect on CO2 reduction, which would be the biggest potential loser if investment signals are further distorted by additional charging.

If we look at the situation of a similar sized 126MW Windfarms sited in Orkney, North Scotland and South England. Assumptions: costs the same - (landowner, Community benefit and rates) apart from Construction costs as +5% for North Scotland and +15% for Scottish Islands, TNUoS rates as -£2/KW South, £20.52/kW North Scotland, £73/kW (current potential discount rate if full single circuit discount was to be approved) in Orkney. Transmission losses (charges) - 3% in both North Scotland and Islands, 0% in the South. Power price of £65/MW (including ROCS) for all. Capacity factors: South 30%, North Scotland 40%, Scottish Islands 46%

The model shows:

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Percentage of fixed outgoings against income (excluding other operating costs, insurance, salaries):

South 10.2%

North Scotland 20.19%

Orkney 39.62%

Electricity generated (take 100% no losses as the baseline)

South 67%

North Scotland 84% (net of 3% losses)

Orkney 97% (net of 3% losses)

Net flow of costs (Use of system charges and Transmission loss charge) from Orkney to South £11.105m per annum.

Environmentally - the economic disincentive in the North and the incentive in the South is counterproductive, with a net flow of incentive over £11 million pounds leading to a 30% reduction in the CO2 saved per annum (Orkney vs South).

Given that recent independent studies have identified significant resources of wind wave and tidal stream energy, around the North of Scotland and the Islands, of European importance – it is difficult to see the justification of deterring investment in these areas.

We hope that Ofgem will reconsider its 'minded to' decision and consider the wider strategic needs of increasing energy diversity and security of resource.

Yours sincerely,

Dennis Gowland

(FSOL – Chairman)

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