

BEINN MHOR POWER

19 November 2010

Stuart Cook, Esq.,
Senior Partner, Smarter Grids and Governance,
The Office of Gas and Electricity Markets,
9, Millbank,
London,
SW1P 3GE.

Your Reference Number: 119/10

Dear Mr. Cook,

Re: Project TransmiT: A Call for Evidence

Summary of Key Points

- 1. Due to the high cost of transmission charges, the cost of building a renewable energy project in the Western Isles can be as much as 50% higher than the cost of a similar plant in Central England.**
- 2. Fossil fuel plants can be located close to high load centres, because their fuel is 'transportable'. Conversely, renewable energy projects must be built where the resources are located, placing them at a very significant commercial disadvantage in terms of the current cost of transmission access.**

We write in response to your Call for Evidence in respect of Project TransmiT dated 22 September 2010.

In particular we would like to address your question as to ... "whether the current [charging] arrangements facilitate appropriately the connection of low carbon generation including renewables ... preferably with evidence of impacts of transmission charges on such generation".

We are writing as the developer of the Muaitheabhal wind farm, which is situated within the boundaries of the Eisgein Estate on the Isle of Lewis in the Outer Hebrides. The Muaitheabhal wind farm received Section 36 consent in January 2010 for a scheme comprising 33 turbines (4 of which are to be owned by the local community), with an aggregate gross generating capacity of up to 118.8 MW. It is expected that consent will be granted for a further 6 turbines with an additional capacity of 21.6 MW in 2011. Muaitheabhal is the first large wind farm to gain consent in the Scottish islands.

In late 2008, over 12 months before consent was achieved, Beinn Mhor Power Ltd and Crionaig Power Ltd, which together own the Muaitheabhal wind farm, engaged advisers,

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including RBC Capital Markets (“RBC”) as financial adviser, to identify a development partner for the current owners of the project. During the course of the process to identify a development partner over the last two years or so, the project’s owners and RBC have jointly engaged with over 40 interested parties, including many of the major UK and European utilities, as well as the leading wind farm developers and several large private equity firms.

RBC has constructed a financial model for the project on behalf of the owners and has been privy to the financial models and assumptions developed by a number of the interested parties.

These economic models take into account, *inter alia*, the costs of equipment procurement, construction and grid connection, wind speeds and energy yield/capacity factor, power prices, the cost of operation and insurance premia, etc. Whilst these assumptions necessarily change from time to time, taken together, it is our belief that they are unlikely to call into question the economic viability of the Muaitheabhal project. However, the one variable that we, RBC and the parties we have approached believe will directly affect the economic viability of the Muaitheabhal project is the level of Transmission Network Use of System (“TNUoS”) charges that the project will have to bear. For your further reference, attached to this letter as Appendix 1 is a copy of a letter dated 1 September 2010 from RBC on behalf of Beinn Mhor Power to DECC on this subject.

TNUoS charges in Scotland are significantly higher – and in some Scottish zones many times higher – than the corresponding charges in England and Wales, with the highest charges at present (currently just over £20 per kW per annum) pertaining in the very north of Scotland, the Western Highlands and the Inner Hebrides.

Compare this with the current levels of TNUoS charge mooted for the Western Isles: initial estimates presented to us by National Grid in April 2009 suggested the TNUoS charge for the Western Isles would be in the region of £60 per kW per annum. A revised estimate received in March 2010 raised this to approximately £76 per kW per annum and the latest figure now being promulgated by National Grid is in the region of £96 per kW. This is over **four times higher** than the next highest TNUoS charge (£22.79 per kW per annum in the Western Highlands and Skye zone).

We acknowledge that the cost of connecting renewable energy projects in the Western Isles will be high, given the need to build the new Western Isles Transmission Link (“WITL”).

However, we are greatly concerned that the economic viability of all renewable energy developments in the Western Isles will be threatened by TNUoS charges being set at (or anywhere near) the elevated level currently being considered. We believe the constraints of the TNUoS charging methodology itself, which affords the system operator little or no discretion to spread the significant costs of bespoke new infrastructure more affordably across transmission users, is likely to be a significant impediment to desired development activity in the islands. Continuing to use the TNUoS method of calculating transmission charges for renewable generation in remote locations will result in a cost burden that is very likely to discourage, even stifle, development activity.

By way of illustration, we attach (as Appendix 2) a brief worked example comparing the impact of current transmission charging methodology of three hypothetical projects in the Western Isles, the Isle of Skye and central England. This analysis shows that, all other things

being equal, building a 100 MW wind farm in the Western Isles would add over 50% to the cost of a comparable wind farm in Central England.

The TNUoS charges applicable in zones in Scotland where renewable energy opportunities are abundant are simply too high to support the otherwise attractive economic case of building large amounts of onshore wind and other renewable technologies – the terrain, wind resource and planning environment being among the best in Great Britain. A different transmission charging regime should be developed for renewable energy, one which allows the system operator to spread the cost of essential new infrastructure such as the WITL across a universe of transmission users that is much broader than just the generators which are reliant on the new infrastructure to connect renewable energy projects in such locations to the national grid.

The TNUoS system works well for fossil-fuel generation installation which can be built in locations which can be selected for their strategic suitability and relative proximity to load centres. Renewable energy generation facilities typically need to be sited in remote locations, where the resources (whether they be wind, tidal or wave) are to be found, a fact which places renewable generation at a huge disadvantage under the current charging methodology for transmission access when compared with fossil fuel generators.

Conclusion and Recommendation

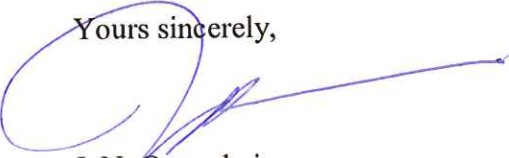
We see three potential solutions for renewable energy in the Scottish Isles:

1. A bespoke adjustment to the TNUoS charging methodology for the Scottish Isles (e.g. a Section 185 scheme);
2. A new transmission charging methodology for all renewable energy throughout Great Britain, to reflect the geographic distribution of renewable energy resources, while keeping the existing methodology unchanged for conventional, fossil-fuelled generation;
or
3. A new transmission charging methodology for all generators.

Our strong preference and recommendation is that a new charging methodology for renewable energy generators as outlined at 2) above be adopted.

We would be happy to discuss this matter in greater detail at your convenience. Finally, we believe this matter needs to be addressed as a matter of urgency, in order to avoid potentially critical delays in the implementation of our project and other important schemes being developed on the islands.

Yours sincerely,



J. N. Oppenheim
Director



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Baron Marland of Odstock
Parliamentary Under Secretary of State
Department of Energy & Climate Change
3 Whitehall Place
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1st September 2010

Dear Lord Marland,

Re: Muaitheabhal Wind Farm (118.8 MW/140.4 MW), Isle of Lewis, Scotland

We write in relation to the Muaitheabhal wind farm, which is situated within the boundaries of the Eisegin Estate on the Isle of Lewis in the Outer Hebrides. The Muaitheabhal project received Section 36 consent in January 2010 for a scheme comprising 33 turbines (4 of which are to be owned by the local community), with an aggregate gross generating capacity of up to 118.8 MW. It is expected that consent will be granted for a further 6 turbines with an additional capacity of 21.6 MW early next year. Muaitheabhal is the first large wind farm to gain consent in the Scottish islands.

RBC Capital Markets ("RBC") has been retained as financial adviser to Beinn Mhor Power Ltd and Crionaig Power Ltd, which together own the Muaitheabhal project, and has been tasked with finding a development partner for the current owners of the Muaitheabhal project.

RBC was originally retained by the project's owners in late 2008. During the course of the process to identify a development partner on behalf of our client over the last two years or so, RBC has worked with more than 40 interested parties, including many of the major UK and European utilities, major developers and large private equity firms. RBC has constructed a financial model for the project and has been privy to the financial models and assumptions developed by many of the interested parties. These economic models take into account *inter alia*, the costs of equipment procurement, construction and grid connection, wind speeds and energy yield/capacity factor, power prices, the cost of operation and insurance premia, etc. Whilst these assumptions necessarily change from time to time, taken together none is likely to call into question the economic viability of this project.

However, the one variable that potentially will determine the economic viability or otherwise of the Muaitheabhal project is the level of Transmission Network Use of System ("TNUoS") charge that the project will have to bear. It is acknowledged that the cost of connecting wind projects in the Western Isles is high and that it may be

appropriate that the developers of wind projects on the islands should bear an equitable share of the cost of the grid infrastructure that needs to be built to connect the islands to the mainland. However, our analysis has shown that, in the case of the Muaitheabhal project, the projected economic viability of the project is extremely sensitive to the level of TNUoS charge to be borne by the project. In fact, the level of the TNUoS charge, *ceteris paribus*, is likely to determine whether or not this project will ever be built.

Initial estimates presented to our client by National Grid in April 2009 suggested the TNUoS charge for Muaitheabhal would be in the region of £60 per kW per annum, or approximately £7.1 million per annum for a 118.8 MW scheme. A revised estimate received in March 2010 suggested the TNUoS charge would be in the region of £76 per kW per annum (costing the Muaitheabhal project a further £1.9 million per annum). Now, a figure in the region of £96 per kW per annum is being promulgated, which would take the Muaitheabhal project's annual TNUoS charge to a level of £11.4 million (an increase of £4.3 million when compared to the April 2009 estimate).

The cost of implementation of the Muaitheabhal project in respect of, for example, balance of plant construction, upgrading of access roads, port facilities and associated infrastructure, etc., is already somewhat elevated, due to its location, when compared to a similar scheme on the mainland. While this is offset to a large extent by the superior wind resource available in the Western Isles, these economics are challenging for an equity investor facing the uncertainty of the connection cost.

Recent decisions (including in respect of the Beaully Denny upgrade and various derogations in respect of certain GB SQSS requirements) provide ample evidence of a desire within Central Government, Scottish Government and the regulator's office to encourage development of wind projects in the Scottish islands. Of great concern to us is the threat to the economic viability of the Muaitheabhal project's posed by TNUoS charges being set at the elevated level currently being considered. Many parties have dropped out of the investment process as a direct result of this issue and today, almost two years on, we have still been unable to identify a development partner for the project. Elsewhere in the UK, without the particular uncertainties associated with grid connections in the Scottish islands, we would expect to have no difficulty in running a competitive auction for an asset of this quality, resulting in a successful transaction being completed for our client with 6 months of launch.

The level of the TNUoS charge is a factor which, unlike the wind and the market price for power and ROCs, can be managed and is within the Department's remit to control. In recognition of the difficulties posed by TNUoS charging to island projects under Section 185 of the Energy Act 2004, in 2008 your predecessor department, BERR, consulted on the introduction of applying a ceiling to TNUoS charges in respect of grid connections to the Scottish islands.

Paragraph (1) of Section 185 of the Energy Act 2004 states, *inter alia*, that the Secretary of State may make an order to adjust transmission charges if it appears to him that:

“... development is likely to be deterred, or otherwise hindered in a material respect, by the level of charges that would ... be imposed by authorised transmitters on persons generating electricity ... from renewable sources.”

By way of example, we have prepared a financial comparison of two hypothetical 100 MW schemes, one on the Isle of Lewis and the other on the Isle of Skye.

We assume the total capital cost of each scheme would be £150 million (i.e. £1.5 million per MW, in round figures). At £96 per kW per annum, the TNUoS charge for the Lewis scheme would be £9.6 million. The scheme on Skye (less than 20 miles away) would have a TNUoS charge of only £2.3 million, based on current National Grid figures. The net present value of the annual difference (£7.3 million) over 25 years at an arbitrary discount rate of 10% would be £67 million, implying an increase in the total cost of delivering the scheme of 47%.

While there are a number of ways of analysing this economically, it seems clear that a £67 million (or almost 50%) impact on a scheme otherwise costing £150 million must be considered to be material. In our view, our client's experience in this case constitutes ample evidence that the necessary investment to ensure development of the Muaitheabhal project is, indeed, being “deterred” by the proposed level of TNUoS charge to be borne by the project, within the intent of the language in Section 185(1)(c).

We would be happy to discuss the potential economic scenarios with you in more detail in a face-to-face meeting.

Yours sincerely,



Dai Clement
Managing Director, Utilities & Renewables
Global Investment Banking

cc: Steve Davies, Department of Energy & Climate Change

Appendix 2

Project Location	Western Isles	Isle of Skye	Central England
Installed capacity	100 MW	100 MW	100 MW
Total project cost ¹	£150m	£150m	£150m
TNUoS zone ²	N/A	3	14
TNUoS charge (£/kW p.a.)	£96.31	£22.79	£1.56
Total TNUoS charge (p.a.)	£9.6m	£2.3m	£0.2m
NPV of TNUoS charge ³	£88m	£21m	£1.4m
Total cost including NPV of TNUoS charge	£238m	£171m	£151m
Total cost vs. project in central England	+57%	+13%	-

Notes:

1. £1.5m per MW total installed cost
2. Source: National Grid: Statement of Use of System Charges w.e.f. 1st April 2010, Issue 6 Revision 0
3. NPV calculated over 25 year project life, 10% discount rate