



embrace the revolution

www.embracewind.com

BWEA



Delivering the UK's wind, wave and tidal energy

Greencoat House
Francis Street
London, SW1P 1DH, UK

T +44 (0)20 7901 3000

F +44 (0)20 7901 3001

info@bwea.com

www.bwea.com

Cheryl Mundie
Senior Manager - Transmission
Ofgem
transmissionaccessreview@ofgem.gov.uk

19th February 2010

Dear Cheryl,

**Transmission Access Review – Enhanced Transmission Investment Incentives,
Ofgem Final Proposals: Decision and Consultation
BWEA Response**

BWEA was established in 1978 and is the representative body for companies active in the UK wind, wave and tidal energy market. Its membership has grown rapidly over recent years and now comprises over 500 companies, representing the vast majority of connected wind, wave and tidal capacity. The UK has a rich variety of renewable energy resources and the largest wind, wave and tidal resources in Europe. These resources must be exploited to meet UK, European and Global needs to reduce greenhouse gas emissions and avert the runaway effects of global temperature rise.

Overview

The BWEA welcomes Ofgem's approach of releasing funds for transmission development on a priority basis. We have concerns that the consultants' reports do not appear to recognise the full picture of renewables and the low carbon economy and could lead to delays in transmission investment that will have severe consequences for the development of UK jobs and manufacturing, in addition to missing government carbon and renewables targets.

Importance to economic recovery and jobs

Investment in the networks is vitally important to deliver offshore and onshore renewables. Without this investment around seventy thousand jobs and associated investment in supply chain will be put at risk.

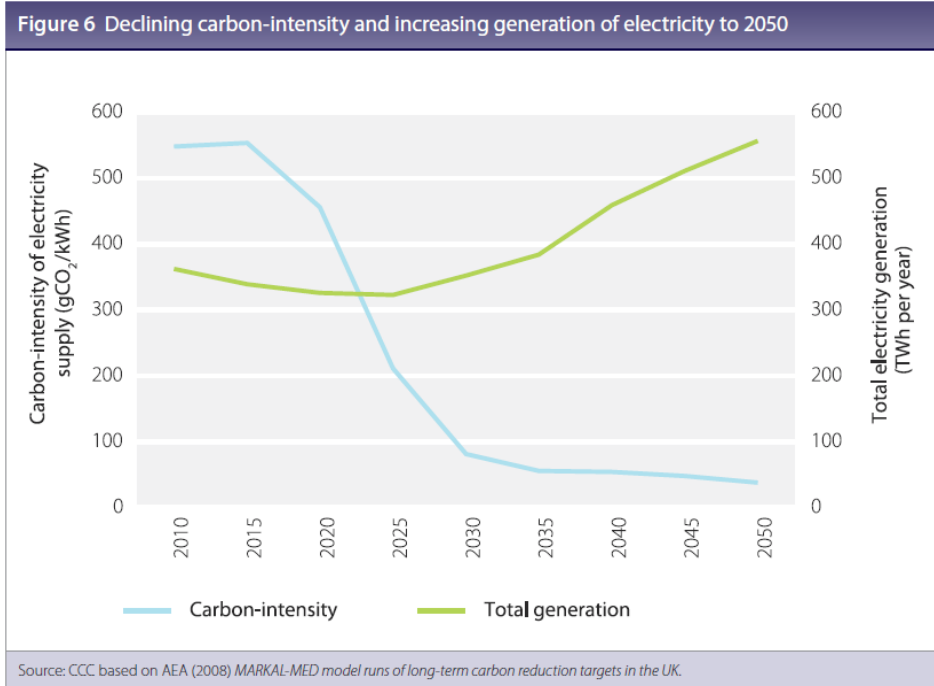
Contribution to 2020 system

We recognise and support the urgency with which Ofgem are progressing their assessment of the necessary transmission investments to deliver the low carbon targets to 2020 and beyond. However, Ofgem need to ensure that sufficient resource and expertise is directed at this work in order to ensure that unnecessary delays are not introduced.

We note that Ofgem has approved £78m for pre-construction and £241m for construction which represents only 0.16% of the £200bn Ofgem believes is necessary to invest in the electricity generation, networks and gas storage over the next decade¹. Given the long lead times for transmission asset delivery there is a very grave danger that the follow-on investments in generation could be delayed, thereby preventing realisation of EU renewable energy targets for 2020 and the government’s low carbon economy beyond that.

Contribution to 2030-2050 system and low carbon economy

The UK Government has a target to cut CO2 emissions by 80% by 2050. The Committee on Climate Change has recognised that there will be a growth in electricity demand from substituting fossil fuel heat and transport with renewable electricity. The committee has budgeted for a severe decarbonisation of electricity by 2030 (see figure below). The transmission investments proposed by the transmission owners are crucial to delivering decarbonisation *and* increased demand.



¹ Project discovery

Mid Wales

BWEA recognises that Ofgem has made an important decision in approving £3million of pre-construction expenditure by NGET for Mid Wales to April 2012. However, BWEA is greatly concerned that the KEMA report indicates that the need case for this investment is not proven. The investment will be vital to deliver increased renewable energy sources from Wales not only up to 2020 but also in the period 2020-2030 and beyond.

BWEA's view is that there is an unanswerable case for this investment driven by the following factors:

- Highly limited and constrained current networks in mid Wales;
- TAN8 800MW target for onshore wind over 5MW and in zones;
- Impact of Feed in Tariff.

There are limited and heavily constrained distribution networks in mid Wales at present which are currently at export capacity limits due to existing renewable generation.

The TAN8 areas, selected in 2005, did not have appropriate grid infrastructure for the planned capacity. Five years later there are still no applications in place to provide the necessary networks to connect the selected zones.

The impact of the Feed in Tariff within Wales has not been considered in the KEMA report. Given the state of the networks it is highly likely, we would argue inevitable, that projects up to 5MW will be delayed by distribution network bottlenecks and that piecemeal investment in distribution networks will follow, some of which will be far less cost efficient than transmission investment to provide the necessary capacity. Any delay in transmission investment will exacerbate this cost.

In addition interconnection between South, North and Mid Wales could provide optimum wider transmission system network strengthening, which would simultaneously provide for:

- Renewable generation in mid Wales
- New generation in North Wales and offshore
- The West Coast HVDC link
- Interconnection to Ireland
- New generation in South Wales
- Reinforcements across the Bristol Channel / River Severn.

Ofgem's duties

When considering policy options in project Discovery, Ofgem states:

"However, there are risks associated with leaving a central entity to make all the key decisions, which could turn out to be wrong."²

The BWEA notes that Ofgem may be in danger of acting as that central entity with respect to transmission reinforcements which have a knock on impact on the bigger picture of jobs, UK manufacturing of renewables, and delivery of carbon targets.

The BWEA therefore urges Ofgem to consider the potential risks of delaying the transmission investments versus the consequences of premature investment.

² Ofgem Project Discovery Consultation Page 4

Timing of investments.

BWEA emphasises the severe risks of being late compared to the far lesser consequences of being early as detailed below.

There is a theoretical economic optimum for the delivery of any transmission investment. The optimum can be determined in two ways depending on whether the network investment is reinforcement to relieve constraints, or a new construction to bring forward new generation projects. In the case of reinforcement these costs are compared to the cost of constraints. For new build, these costs are compared to the higher costs of generation or carbon reduction in the market if lower cost generation projects are delayed.

However, the theoretical economic optimum for transmission delivery depends crucially on timing. Firstly the time taken to develop the transmission asset and secondly the time taken to develop the generation projects. Rarely, if ever, is the perfect timing anticipated or achieved. As a result, the transmission investment is either delivered earlier than the optimum time or later than the optimum time.

Ofgem must estimate the inevitable costs of early or late delivery in its decisions.

In BWEA's view late delivery has far greater costs than early delivery. The costs of being late include: constraint costs on existing generation, higher market prices due to reduced competition, and higher support costs for renewables.

If transmission investment is later than optimum, there are addition costs of constraints whilst outages are taken to make the reinforcements. These costs are much less for early investment.

BWEA's notes a concern expressed by some that these investments, in hindsight, may be judged unnecessary. BWEA considers such concerns to be unfounded. Ofgem and its consultants are currently considering these investments in a 2020 time frame. Many of these assets will not be completed until close to that date due to planning timescales. The assets will be in place for decades after that point. The renewable energy and decarbonisation targets to meet the government's 2050 targets for 80% CO2 reductions, plus the committee on climate change's carbon reduction budgets to decarbonise the power sector from over 500g/kWh today to less than 100g/kWh in 2030, means that these investments will certainly be judged to have been absolutely efficient and necessary. In addition early investment helps to alleviate overall system and voltage constraints with commensurate operational savings. It makes the system more resilient to faults and stress situations. It reduces losses. Under-utilisation probably only lasts a couple of years and the worst case Discounted Cash Flow effect over a 40 year lifespan for consumers is negligible.

On balance we believe that there is a vitally strong cost incentive to deliver transmission earlier rather than later.

Questions

Chapter 4 Question 1. Do respondents have any comments on the principles or the proposed drafting of the legal text to give effect to our Final Proposals?

BWEA wants to see transmission licensees incentivised to deliver the network investments necessary to deliver the decarbonised electricity system. We note that investments which rely on user (i.e. generator) commitments will nearly always be delivered later than optimum. For reasons stated above we support effective regulatory mechanisms which produce early rather than late delivery of investments.

Chapter 5 Question 1. Do respondents have any views on the way forward?

BWEA requests that Ofgem considers our generic comments earlier in this response to inform the way forward.

Close

BWEA would welcome the opportunity to discuss any aspect of this response, please don't hesitate to contact me. We appreciate the extension of time afforded us to respond to this consultation.

Yours sincerely,

A handwritten signature in blue ink, consisting of a stylized, cursive 'G' followed by a horizontal line.

Guy Nicholson CEng MIET MEI Head of Grid for BWEA