



Mynydd Awel Mold Business Park Maes Gwern Mold, Flintshire CH7 1XN

T: 01352 757 604 F: 01352 700 291

E: info@westcoastenergy.co.uk
W: www.westcoastenergy.co.uk

Stuart Cook
Senior Partner
Smarter Grids & Governance
Ofgem
9 Millbank
London
SW1P 3GE

15th November 2010

Dear Stuart

# Project TransmiT; A Call for Evidence

#### **Preamble**

West Coast Energy Ltd welcomes the opportunity to submit some comments on transmission charging and associated connection arrangements as part of the Call for Evidence for Project TransmiT. West Coast Energy have acted as developers and consultants to a number of major windfarm projects throughout Great Britain and have obtained consent for over 500MW of projects, onshore and offshore, with a further 1000MW either going through planning or with a planning application being prepared. We have also been active participants in various electricity industry fora including the Transmission Arrangements for Distributed Generation (TADG), Transmission Access Standing Group (TASG) and in the Active Networks project team of the Distribution Working Group (DWG). We were also involved in the preparation of the new ENA connections guide for distributed generation.

## **General Comments**

West Coast Energy will focus the majority of its comments on the role of Distributed Generation (DG) and its impact on and more particularly how it is impacted by transmission charging and transmission connection arrangements. The magnitude of the distributed generation as against transmission connected generation is not clear but our estimates show that roughly 50% of the operational, consented and proposed onshore wind farms in Britain will be DG i.e. connected to the distribution system and this should not be ignored in any discussion of transmission charging and connection arrangements.

# Transmission Charging of Transmission Connected Generators

The current Transmission Charging Methodology was developed when the industry consisted of a relatively small number of large fossil fuel fired or nuclear stations



connected to the Transmission System with only a small amount of small DG and/or renewable energy power stations. The advent of large numbers of renewable energy generators, by necessity located in areas where their driving force (wind, hydro etc.) is located but more than likely remote from the GB centres of energy demand raises the question about whether the current Transmission Charging Methodology is fit for purpose. The methodology is nominally locationally based but in fact the majority (~85%) of the revenue the methodology is designed to raise comes from the residual component and not from the locational element. Also the methodology delivers a 27/83 Generation/Demand split in revenue but in 2005 serious consideration was given to a 0/100 split more in line with the situation in Europe.

## Transmission Charging of Distributed Generators

There has been considerable work by National Grid, OFGEM, DNOs and Generators, notably at TADG in 2006-07, on whether DG should be charged and by what model for its use of the Transmission System. The basic premise appears to be that generation directly connected to the transmission system is discriminated against compared with the same generation connected via the distribution system. There have been proposals to make distribution generation projects subject to transmission use of system charges based on either a so-called Gross Supplier or Net Distributor model. We would comment the following:-

- 1) Almost invariably the electricity generated by projects (usually relatively small in size) connected to the distribution networks will be consumed by demand customers connected at the same or nearly the same voltage level. The electricity will more often than not go nowhere near the transmission system and why these projects should pay for the use of a network they don't use is hard to justify. An appropriate analogy would be to expect drivers on B roads in the Birmingham area to pay the charges on the M6 Toll road because they are affecting traffic flow on that motorway.
- 2) There has been much talk of generators having the ability to choose between a transmission or a distribution connection for a suitably sized generation project. In our experience of over 1000MW of wind projects we have never been presented with that choice and suggestion seems to be dealing with solely a hypothetical situation.
- 3) There is an acute danger that if DG TUOS charges were to be adopted of actual discrimination because while transmission connected projects will pay transmission use of system (TNUoS) charges, distribution connected projects will pay TUOS <u>and</u> Generator Distribution Use of System (GDUoS) charges.
- 4) There is also a false linkage between generator TNUoS which are based on installed capacity as against the triad benefits which are dependent on the extent to which the generator is actually operating at the times of the triads. The latter is uncertain and National Grid has recently estimated an average 15% load factor during the triad periods for wind generation.
- 5) The principle that distribution connected generation should be treated as negative demand has a long history. In 1992 a threshold of a 100MW was established

below which embedded generators were to be ex empt from TNUoS charges. There has been a lack of clarity about a new lower threshold but imposing TNUoS charges on distributed generators will cause mayhem with the new Government sub-5MW Feed-in Tariff proposals; potentially making them unworkable. Or perhaps a new, sub-100MW threshold is proposed but on what basis is unclear?

- 6) The choice between a Gross Supplier or Net Distributor model should be academic but it is worth pointing out that distributors are inherently more stable than suppliers, several of which have failed in recent years. It is also the distributors which can physically control the flow of electricity onto the transmission system and so have to be involved anyway. In contrast to the preconsultation document my recollection of TADG is that only National Grid was in favour of the Gross Supplier model; all other participants could see either no basis for change or at the very least favoured the Net Distributor model.
- 7) If DG were forced to pay TUOS charges it would surely be appropriate for them to be able to accede to the CUSC, (on the basis of no taxation without representation) adding significantly to the number of CUSC members and potentially giving rise to large number of CUSC amendments etc and the administrative burden on National Grid.

### Securitisation

When an application is made to connect a power station to the transmission network reinforcements may be required but if the applicant subsequently terminates and transmission work has already begun, this can result in abortive costs known as Final Sums. In order to protect Transmission Licensees and ultimately the end consumer from the risk of these abortive costs, applicants are financially liable for the Final Sums associated with their projects. Applicants are required to provide financial security by way of Escrow accounts, Parent company guarantees etc to cover these potential costs with the liabilities based on either: the Final Sums (FS) security methodology or the Interim Generic User Commitment (IGUC) methodology.

West Coast Energy has experienced difficulties with relatively small (<20MW) projects being asked to provide security against major transmission reinforcement projects in Scotland and England involving potentially millions of pounds of liability totally outwith the scale of the projects. Securitisation may be appropriate for large scale transmission connected power stations but not for small scale DG. If a small DG project failed to proceed its impact on the requirement for the national transmission upgrades would be negligible. This requirement for securitisation has impacted on several and has inhibited some projects from going forward.

Distributed generation projects are carried out in the name of special purpose vehicle (SPV) project companies with no credit history and arranging parent company guarantees is very difficult, expensive and counterproductive when it comes to raising project finance

# **Transmission Access**

While the Government has recently implemented reforms to the access arrangements to the transmission network the Statement of Works process for DG requires attention.

The Statement of Works process to a developer is opaque; while a DG developer pays for a Statement of Works it has to do so via the DNO but does not know what is submitted, when it is submitted and when it is due. This is completely unsatisfactory. Also the Statement of Works is a two stage process with a payment £4k and a month to decided if a Statement of Works is required from National Grid and then a further say £10k and three months for the actual Statement of Works. However in Scotland it can usually be assumed that a Statement of Works is required and we might as well move direct to the Statement of Works saving £4k and a month.

I hope you find my comments useful but if you wish to discuss them further please do not hesitate to contact me.

Kind regards

Yours sincerely

Dr David Walker

Head of Grid & Regulatory Affairs

West Coast Energy Ltd