

GB Transmission Charging: Initial Thoughts.

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Introduction.

Fred. Olsen Renewables Ltd (FORL) thank National Grid for their efforts in producing this set of initial thoughts in the same time frame as the small generator's consultation. This creates a unique opportunity to assess the potential inter dependence of individual measures on the overall market.

FORL are a developer investing in the UK market. FORL have recently completed the largest on land wind farm in the UK in the Scottish Borders Region, and are commencing construction on 2 further projects with Electricity Act Sec 36 consents in 2004. The total capacity on these three sites will be in excess of 160 MW. FORL have a further 80 MW in the advanced stages of planning which could be operational by the end of 2005. The plan is to project finance this portfolio and subsequent projects. It is essential that the treatment of Scottish/ northern based renewable energy developments under the new Transmission Charging arrangements as bankable as those projects based in England and Wales (E&W).

Background.

Generators and grid system owners in Scotland, still believe that the Scottish 132kV network should be re- classified as Distribution under BETTA. On balance they are prepared to reluctantly accept the short to medium term position of 132kV as Transmission, as long as there are clear procedures laid down for readdressing this designation once the first phase of the Transmission upgrades have taken place in 2007-2010. It is essential that new and existing generation connected at 132kV in Scotland is treated in the same way as distributed generation in E&W. To achieve this, charging mechanisms should be comparing 132kV licence exempt generators in Scotland with distribution connected generators in E&W on a like for like basis. This is not done in the DTI and Ofgem Small Generator's Consultation, where 132kV connected Scottish generators are compared to Transmission connected generators in Scotland. If the charging regime for 132kV connected generators in Scotland does not

reflect the charges for similarly connected generators in E&W, there will **not** be a level playing field for Scottish licence exempt generation under BETTA, and small generators will have to reassess the designation process of the 132kV system in Scotland now. Ofgem, DTI and National Grid should satisfy themselves that the treatment of the 132kV connected licence exempt generators in Scotland is not discriminating against their ability to compete in the new BETTA market place, and contribute towards both renewable energy targets and jobs.

Current Model

There are a number of issues raised by the unrestricted application of the E&W transmission charging model on the new Great Britain (GB) market. These are listed as follows:-

1. The current model produces large potential price differentials between generation connected in the north and south of the GB market. This added to the variability of transmission charges (annual reviews) creates an unstable background for investment in new plant. If the range of locational price signals could be capped, liability would become limited and investment would have a good long term signal for investment purposes.
2. The principle of locational charging signals, within TUoS tariffs, is accepted by FORL as a legitimate market tool. The level at which it is being proposed in this paper however is punitive. There are many locational signals followed by generators when locating new plant. These are often dominated by good long term fuel availability, resource availability, transport links (including grid), and the ability to gain planning consent. These long term physical and institutional signals guide new plant to suitable economic and sustainable locations. Where a high priced locational tariff, (which in itself is variable), over rides these other signals the effect will either be -:
 - a. If locational signals act strongly against the most sustainable locations for new investment, new generators will not invest.
 - b. Generators will run into long delays and other infrastructure barriers when trying to locate plant based on the model's view of the country. For example it will always be difficult to run pipelines to and through built up areas, and get planning in areas of high population.
 - c. Generators will follow the locational signals, and development will be forced into areas where it will, in the long term, cost more than is saved by the use of the transmission system to transport the power. There is an inherent insecurity in locating plant on the basis of a model, rather than real on the ground constraints.
3. The charging system as currently operated in E&W does not act as a bankable incentive for locating generation where demand is high. The benefits are a mirage, as they are extinguished as soon as generation locates. The negative charges are however a real deterrent to banks and investors when considering the operation of existing plant and the construction of new generation. The uncertainty of charge year on

year, added to the potentially high penalties, combine to create a significant barrier to investment.

4. The current model does not seem to take security of supply into account when apportioning value to locational signals. The proposed charge of £20.69/kW installed in the north of Scotland area could lead to the premature closure of Peterhead Power Station (based on information from SSE. This in turn would create security of supply issues for Aberdeen and the Inverness area. Even in these circumstances the model would still show a positive connection figure, and therefore no new generation would locate in the area. In addition the removal of Peterhead would destabilise the rural grid network, and prevent the addition of any intermittent generation.
5. Signals and development timescales do not match. The proposed GB locational tariffs give strong negative signals to current generation located in areas of low demand. If these signals become punitive and lead to plant closure in the short term, (where generator margins are already small) new plant will not be able to replace the old or mothballed plant overnight. There could become an imbalance in a relatively short period.
6. The locational signals do not take into consideration any environmental impacts associated with fuel or other efficiencies. A more productive wind farm in Scotland would be discouraged in favour of a less productive location in the south east of England. There would be considerably greater difference in generation between an average Scottish site and East Anglia site, than the transmission losses incurred in transporting the power south (and therefore CO2 target / renewable order contribution).
7. A locational signal producing a high range of values may cause distortions in another part of the market, which are then countered with an equally big subsidy. These payments are ultimately paid by the consumer. To avoid expensive debt finance the industry requires long term stable signals, with capped manageable variations in system and other charges.
8. The system potentially discriminates against smaller investors and generators in Scotland. In E&W this is the small regional based generators are embedded in the Distribution system. In Scotland this will not be the case. These charges will produce an inequality of treatment for this class of generation and business in Scotland.

In summary the current E&W model applied to a GB system would potentially create substantial, unstable burdens for Scottish based generation, and unstable, unbankable and illusionary incentives to southern based generators.

FORL would suggest a modification to the existing arrangements where TUoS was set by applying a postage stamp charge to the operation of the system, in addition to a lower **CAPPED** locational charge. The locational element of the UoS charge would be fixed for 15years from first generation of the new plant and set when signing the connection agreement. If the addition of this generation altered the locational signal, the next generator locating in the same area would secure a revised figure. The locational element of the UoS charge would be capped to ensure it never became

punitive. In this way it could never over ride other strong infrastructure locational signals. At the start of this system all existing generators would be fixed on a tariff for 15 years to reflect their existing value on the system.

FORL trust the above comments are constructive. This paper combined with the small generator's consultation would potentially create a number of market barriers to small non portfolio based generators in Scotland. FORL would be unlikely to raise sufficient project based finance to sustain further investment in such a market.