nationalgrid

PRE-CONSULTATION DOCUMENT

GBECM-17

Transmission Charging – A New Approach

A proposal by:
Scottish Power
Scottish and Southern
Scottish Renewables Forum
Scottish Government

November 2008

This pre-consultation has a 28 day period for response. Comments should therefore be emailed to thomas.ireland@uk.ngrid.com no later than **Thursday 4th December 2008**.

Table of Contents

1. Executive Summary

This pre-consultation document presents an option for introducing an alternative charging methodology as proposed by the Scottish Government.

The document has been published on the National Grid charging website at the following address:

http://www.nationalgrid.com/uk/Electricity/Charges/modifications/uscmc/

National Grid is seeking industry views on this proposal prior to any further development.

2. Introduction

As the transmission licensee authorised to co-ordinate and direct the flow of electricity onto and over the transmission system within Great Britain, National Grid has duties under the Electricity Act to develop and maintain an efficient, co-ordinated and economical transmission system and to facilitate competition in generation and supply.

Along with these high level duties, National Grid is obliged under its transmission licence:

(i) to keep the Use of System Charging and Connection Charging Methodologies at all times under review

(ii) to make such modifications of the Use of System Charging Methodology as may be requisite for the purpose of better achieving the relevant objectives, which are:

a) to facilitate effective competition in generation and supply;

b) to result in charges which reflect, as far as reasonably practicable, the costs incurred by transmission licensees in their transmission businesses;

c) in so far as is consistent with a) and b) above, as far as reasonably practicable, they properly take account of the developments in transmission licensees' transmission businesses.

(iii) to make such modifications of the Connection Charging Methodology as may be requisite for the purpose of better achieving the relevant objectives, which are

a) to facilitate effective competition in generation and supply;

b) to result in charges which reflect, as far as reasonably practicable, the costs incurred by transmission licensees in their transmission businesses;

c) in so far as is consistent with a) and b) above, as far as reasonably practicable, they properly take account of the developments in transmission licensees' transmission businesses;

d) in so far as is consistent with a), b) and c) above, of facilitating competition in the carrying out of works for connection to the GB transmission system.

In addition to the relevant objectives above, the transmission licence also prohibits National Grid from discriminating against any user or class of users unless such different

treatment reasonably reflects differences in the costs of providing a service. Within this context, not charging cost reflectively could itself be interpreted as discrimination.

Before making a modification to the Use of System Charging or Connection Charging Methodology, National Grid is also required by the transmission licence to consult with CUSC Users on the proposed modification and allow them a period of not less than 28 days within which to make written representations.

There may also be instances where additional industry consultation, via a pre-consultation, may be beneficial, particularly to gather wider representations at an early stage. Pre-consultations have been very useful when the proposal is a principle rather than a fully worked up change to the methodology. As the alternative charging approach being proposed would have a significant impact on a large number of transmission Users, it is considered such an instance.

The purpose of this document is to set out for pre-consultation an alternative approach to transmission charging as submitted via the Scottish Executive.

We recognise that as well as changes to the charging methodologies, implementation of such a significant revision to transmission charging may have implications for other core industry documents; we welcome Industry thoughts on any directly consequential changes.

3. Background

On 16 September the First Minister of the Scottish Executive wrote[1] to National Grid setting out an alternative to the current TNUoS charging methodology. The proposals had been developed in conjunction with Scottish and Southern Energy, Scottish Power and Scottish Renewables Forum. The view was presented that the proposal provides "a greater fairness and predictability to the charging system and would provide a greater incentive for development of Scotland's energy potential without altering the amount of money that National Grid receive under the current model". The First Minister requested that consideration should be given for National Grid, as the only party currently able to raise a modification proposal, should raise an industry consultation for the proposal presented.

National Grid believes that although transmission charging modifications would not normally be proposed by industry participants, that exceptional circumstances may exist in this instance. Firstly, a significant industry minority have been involved in the development of the proposals and National Grid would welcome a broader and complete industry assessment against the relevant charging objectives. In addition, the proposal has been made during a period of significant industry change, namely the Transmission Access Review, and therefore it seems appropriate to consider a full range of charging options.

The publishing of the pre-consultation document at this time ensures that all charging proposals can be considered concurrently.

4. Charging Proposal

4.1 Option for alternative transmission charging

The text for the submitted proposal has been reproduced in Appendix 1.

[1] http://www.nationalgrid.com/uk/Electricity/Charges/modifications/uscmc/

5. Responses to this Pre-consultation

Comments and views are invited on the alternative charging approach raised in this pre-consultation document and in particular its assessment against National Grid's charging relevant objectives. National Grid anticipates discussion of the comments and views raised by the industry will take place in a forthcoming Transmission Charging Methodology Forum meeting. To ensure comments are included, responses must be received by close of business on **Thursday 4th December 2008**.

If you wish to provide comments on this pre-consultation document, responses are welcome via email to: thomas.ireland@uk.ngrid.com

Alternatively, Users can send their comments in writing, addressed to:

Tom Ireland
Electricity Charging & Access Development
National Grid Electricity Transmission plc
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

If you have any further queries, please do not hesitate to contact Tom on 01926 656152.

Appendix 1: Transmission Charging – A New Approach Submitted by the Scottish Government[2]

Context

The current GB transmission charging methodology results in high charges for Scottish based generators which are unstable, unpredictable and highly volatile year-on-year. Further, there is extreme regional variability in charges with the highest charges levied on generators sited in areas of the best renewable resource. As a consequence, transmission charging is adversely impacting on both the development of renewable generation and on future investment in the thermal generation fleet that is required, for security of supply, to support intermittent renewable generation.

The financial benefits available to renewable generators have, to date, been sufficient to ensure that projects in areas with strong wind yield and lower capital costs have tended to come forward despite high transmission costs. However, in order to meet the Scottish, UK and European targets for 2020 and beyond, many more renewables projects are required - including those with higher capital costs (caused in large part as a result of increases in global materials costs) which are currently being discouraged by high and volatile transmission charges.

In addition, these high and volatile transmission costs make it very difficult to justify necessary investments in thermal generation, particularly in areas remote from the GB load centre. Such thermal plant is required to back up and support renewables yet does not attract the financial benefits available to renewable generation. It is clearly inappropriate to incentivise closure of generating plant when there is likely to be a requirement for replacement base load and flexible plant in the next few years. Overall, we feel that the current system of charging is a significant barrier to the achievement of ambitious renewable targets and could result in closure of essential thermal plant. In summary the current system of charging is not fit for purpose and will not deliver broader energy policy objectives.

In April 2008, the Scottish Government in conjunction with Scottish Power, Scottish and Southern Energy and Scottish Renewables Forum, presented a paper to Ofgem outlining its concerns regarding the current transmission charging structure and calling for change. Separate meetings were then held with Ofgem and National Grid to discuss this issue further and it was subsequently agreed that an alternative model for transmission charging would be presented. This paper sets out the proposed new charging model.

Proposal

The current GB transmission charging methodology has two particular consequences which are adversely affecting the entry of new generation to the GB electricity market. Firstly, the resultant tariffs are unstable, unpredictable and highly volatile hence creating an uncertain environment for investment. Secondly, the methodology was intended for 'old' generation technologies and for a different market and trading environment and, as a result, discriminates against renewable generation. Both of these particular issues could be addressed quickly and effectively by implementing the proposal set out below.

The locational element of transmission charges incurred by generators represents only around 15% of total generator charges, although this percentage is the net figure and masks considerable regional differences with generators in the North paying £190m and generators in the south receiving a payment of £140million. This creates a substantial

[2] The views expressed in this appendix are those of the Scottish Government and not National Grid. First person refers to the Scottish Government and not National Grid. Emphasis in the text is also that of the author's and not National Grid's.

and unjustifiable imbalance between overall costs incurred by generators in the north and their counterparts in the south.

Our overall principle is that transmission charges for generators that use the Great Britain transmission system are levied at a uniform rate for each unit of energy that enters the system, irrespective of its location.

We propose that the basis of charging generators should be changed from paying for the maximum entry **capacity (MW)** to paying for the **usage** made of the system **(MWh),** i.e. moving from a 'reservation' capacity charge to a 'usage' commodity charge. This charge would be derived annually from the revenue requirement (£) and the forecast generation output (MWh). Both of these parameters are stable year-on-year. Users and National Grid would be held neutral to any under- or over-recovery through a revenue restriction correction factor, such as that already in the transmission licence. Currently, the charge would be around **£1/MWh.**

Benefits
This proposal has a number of benefits:

• **Simplicity:** This change would provide a simple, clear and transparent basis for charging that would be easily understood by all market participants.

• **Predictability:** A uniform charge would be stable and therefore predictable. Predictability over investment timescales would provide greater certainty for generation and network planning and investment decisions.

• **Non-discriminatory:** All generators would pay the same rate for accessing the transmission system regardless of technology, size or location. This would facilitate a 'level playing field' in the energy market. The proposed model would also ensure that renewable energy is not the subject of discrimination in terms of charging especially from more remote areas as stated in the January 2008 draft directive on renewable energy.

• **Cost neutral:** Implementing such a change would not change the total revenue recovered from the charges paid by generators to National Grid. It is also important to note that demand consumers would not be affected by this change in any way.

• **Cost reflective:** A commodity charge would recognise the characteristics of different generation technologies, in particular the load factor. Such factors are already being acknowledged in network planning and operating assumptions, and hence network investment.

• **Supporting Government objectives:** This change would remove a key barrier to renewable generation in areas where such resources are greatest, while also sending a stronger signal to consider replacement investment in thermal baseload. It would also be compatible with 'Connect & Manage' as advocated in the Transmission Access Review which requires sharing of capacity rather than reserving capacity for the sole use of that generator.

• **Developing a European energy market:** This change would be a step towards integration with the wider European energy market and compliance with European charging guidelines.

Implementation

This would be a simple, but highly effective, change. It would be easy to implement as National Grid already has all the required information. It would not require investment in new IT systems, contractual revisions or changes to the industry governance structure. It is also important, especially in the current context, to reinforce the point that this model would have no impact upon consumers at all. The overall sum that National Grid would receive from generators through Transmission Charging would remain the same. But the regional differentials which currently exist would be removed. For example a 100MW windfarm in the North of Scotland which current pays around £2.2 million in charges would pay £0.3 million under this model.

While such a change would be controversial with 'losers' (i.e. those who face higher charges under the proposal), this would not be an unprecedented approach to charging. Charges that generators pay for grid balancing services are already determined on a £/MWh basis and the industry is actively considering, as part of the Transmission Access Review, a change to recover 85 per cent of the transmission revenue from generators on a £/MWh basis.

One outcome of adopting this approach would be to remove the locational signal from the transmission use of system charge for generators. Again, alternative approaches to providing a locational signal are already being considered by the industry; for example, that generators should be required to pay for local sole use transmission assets. A charge for local assets would provide a locational signal to generators which is cost-reflective and, arguably, more focused on the individual user than the current zonal use of system charge.

Transmission Access Review

Following publication of the Energy White Paper 2007, the UK Government and Ofgem launched the Transmission Access Review to explore a range of issues associated with the technical, commercial and regulatory arrangements for access to the GB transmission system. The chief aim of this wide-ranging review was to support delivery of the UK Government's aspiration of 20 per cent of electricity supplied by renewable generation by 2020 and any targets that might be agreed at European Union level. The Final Report of the Transmission Access Review was published on 26 June 2008 along with the UK Government's Renewable Energy Strategy.

A key conclusion of the Transmission Access Review is that there is a pressing need for fundamental change to the grid access arrangements through implementing, in the short term, a form of 'Connect & Manage' while new enduring access arrangements are developed. However, limitations to the form of 'Connect & Manage' being sought by Ofgem and National Grid which seek to severely limit its applicability in Scotland may remove any potential benefit and the threat of removing evergreen transmission capacity rights from incumbent generators and auctioning it discourages the investment required. The Final Report of the Transmission Access Review acknowledges that such changes to the access arrangements have implications for the existing charging methodology and consequently detailed consideration is required. Critical to this is addressing the discord between charging to reserve network capacity when, in reality, generators are sharing that capacity.

In reviewing the access and charging arrangements, the industry must be mindful of the UK Government's wider energy policy. In its Renewable Energy Strategy, the UK Government states its expectation that over 45GW of new generating capacity will be needed by 2020, of which around 30GW will be renewable. Further, the UK Government expects that around one third of renewable capacity will come from onshore wind and a large proportion of onshore wind development will take place in Scotland.

There is a clear need to revise the current charging arrangements to reflect changes to the access arrangements. Further, the deficiencies of the current charging methodology must be addressed to ensure there is a stable climate for achieving the level of investment in new generating capacity that is required.

Conclusion

There is a significant risk that the current review of charging within the Transmission Access Review will completely overlook the need for reform of the unjust locational charging model and we will miss a "window of opportunity" to deliver a solution which fully aligns with UK and Scotland energy policy objectives.

This alternative charging proposal would stabilise the allocation of transmission costs to generators, would provide the certainty necessary for new generation projects to come forward and, hence, would ensure security of energy supply over the long term. It is a model which reflects the different context in which energy generation now operates and the need to remove barriers and put in place appropriate incentives for new sources of energy and a diverse mix of generation technologies.