# nationalgrid

# Minutes

Meeting name	Electricity Transmission Charging Methodologies Forum (TCMF)
Date of meeting	10 <sup>th</sup> July 2013
Location	National Grid House, Warwick & Via Teleconference

#### Attendees

Patrick Hynes	National Grid (Chair)	Jonathan Wisdom	Npower	
Jackeline Crespo-	National Grid	Karl Maryon	Heyen Dower	
Sandoval	(Technical Secretary)	ran waryon	Haven Fower	
Andy Wainwright	National Grid	ional Grid Paul Brennan		
Alex Troth	Opus Energy	Paul Jones	EON	
Amisha Patel	ESBI	Steve Davies	Department of Energy and Climate Change	
Cem Suleyman	Drax Power	Pavel Miller	Energy UK	
Frank Prashad	RWE Npower	Robert Brown	Cornwall Consulting	
Gavin Baker	Smartest Energy	Simon Holden	Adjacent Power	
lan Barnard	E.ON Energy Solutions	Paul Mott	EDF	

#### **Apologies**

Ricky Hill	Centrica	
Tim Russell	Russell Power	

All presentations and supporting papers given at the TCMF meeting can be found at: <u>http://www.nationalgrid.com/uk/Electricity/Charges/TCMF</u>

#### **1** Review of actions from previous meeting

Action (Outstanding / Completed / New)	Responsibility	Due Date	Comments
Contact DCMF Chair to ascertain if attending a meeting to present on the embedded review would be helpful to DCMF members.	National Grid	July 13	Completed

# 2 Ongoing modification proposals – Jackeline Crespo-Sandoval

Details of these can be found in the TCMF slide pack available on National Grid website at: <u>http://www.nationalgrid.com/uk/Electricity/Charges/TCMF</u>

#### **3** Update on Review of Embedded Generation Benefits – Andrew Wainwright

National Grid explained why there was a need to review the current embedded generation arrangements. An update on the embedded focus work was given noting that the general consensus within the focus groups was to concentrate on the effect on TNUoS charges, before considering BSUoS and transmission losses. The chair emphasised that all contributions, feedback and potential ideas arising from this discussion will be fedback to the focus group.

The views were that in general, when reviewing the current embedded arrangements, the overall effect from all generation (i.e. both transmission and distribution connected) and demand needs to be taken into account and all potential impacts should be carefully considered.

The presentation started with a description of what constitutes embedded generation and who pays TNUoS charges. The discussion then concentrated on cost reflectivity and the implications of having a locational and residual element.

Two locational signal approaches were presented: a net approach (i.e. embedded generation netted from demand so is subject to a negative demand locational signal) and a gross approach (i.e. embedded generation receives same generation signal as transmission connected) and discussions were held on whether the locational signal was the same for both. A participant noted that a potential issue is that the locational signal was not the same for embedded generation and transmission generation.

One suggestion to address the issue of cost reflectivity was to extend the locational element of TNUoS charges to recover the total Transmission Owner (TO) allowed revenue. A potential drawback highlighted was that it will make the signal backward looking instead of forward looking. Also, removing the residual would make it difficult to recover the exact total TO revenue. On this basis it is expected that there will always be a residual element and the only variation will be the size.

The impact of the residual element on the embedded benefit was also discussed including potential ways of calculating and charging the residual. The presenter explained that both the demand residual and generation residual elements gave embedded benefits to an embedded generator. In the case of the demand residual element this was through netting with demand and therefore avoidance of the demand residual charge for that demand user. It was also noted that for certain classes of plant it was very difficult to receive this full benefit i.e. if wind was at low output over peak it would only receive a fraction of the benefit. National Grid agreed that in quantifying the issue this should be made clear.

In the case of the generation residual element this was through the embedded generator simply not being exposed to the generation TNUoS tariff. One suggestion given was to commoditise the payment for the transmission side. National Grid pointed out that under CMP213 – TransmiT charging review, the use of an annual load factor in the calculation of TNUoS charges was being proposed and the load factor approach on some of the options was closer to commoditisation than the status quo.

Discussions then followed on the benefits that embedded generation have on the transmission network in terms of avoided investment cost. The presenter explained how he believed that this could be broadly considered in two areas; reduced generation connected infrastructure and reduced demand infrastructure.

There was discussion on whether it was network charges should be compared (i.e. transmission and distribution) to ascertain whether it was reasonable to consider a trade-off between generators being the appropriate charge for the network they were connected to. It

was pointed out that when considering new projects, whilst generators have the choice to connect to the distribution or transmission network in most cases a developer would consider fuel type first. Also, it was noted that generators expect to be liable for either distribution or transmission charges but not for both. It is likely that the idea of facing distribution and transmission charges may have a detrimental effect on investment confidence.

The subject of access rights was briefly mentioned when one attendee noted that embedded generation can trade in the market, yet they are not expected to pay for transmission access rights. It was noted that any change to access rights at this level would substantially alter the market structure.

Note was drawn to the different ways that demand and generation are charged (i.e. Triad, demand metered volume and TEC based) and it was generally agreed that this should be further considered to understand whether such effects could further complicate views as to the embedded benefit.

# Summary of suggestions from the meeting:

- Clearer definition of issues and what the group are trying to accomplish
- Quantification of the volume of embedded generation in GB
- Quantify transmission any cost savings from being embedded
- Consideration of impact from other commercial arrangements in wider GB
- Consideration of different ways that demand and generation are charged
- Consideration of access rights for distribution
- Consideration of impact of embedded generation on consumer bills
- Consider whether transmission generators and embedded generation should have the same locational signal
- Arbitrary limits on size of embedded generators liable for transmission charges (i.e. not less than 100 or 50) should be avoided
- Consider the use of the Redpoint model to carry out high level analysis

National Grid stated that the embedded focus group will meet again in August and September, and aim to make their conclusions available after this. An informal industry consultation is being considered prior to the submission of a formal CUSC modification proposal in the Autumn. Further details will be given at September's TCMF.

# 4 Next TCMF

Next meeting: Tuesday 10 September 2013

- **Time** : 10:00 am to 3:00 pm
- Venue : Energy Networks Association 6th Floor, Dean Bradley House 52 Horseferry Road London SW1P 2AF