



First Hydro Company is part of a joint venture between  
International Power plc and Mitsui & Co., Ltd.

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Dear Tom,

### GBECM-11 Pre Consultation Document

International Power (IPR) is responding to this Pre-Consultation Document – Charging Arrangements for Generator Local Assets - on behalf of First Hydro Company, Saltend Cogeneration Company Ltd, Rugeley Power Ltd, Deeside Power Development Company Ltd and Indian Queens Power Ltd.

#### Summary

After consideration of the options presented in the paper, a summary of our preferences is as follows:

- We believe that the calculation of TNUoS could be split into local and zonal TNUoS, where the zonal TNUoS is based on the current methodology, and the local TNUoS is based on the difference between nodal cost and the generation marginal cost weighted average for the zone.
- For local circuits, the existing GB security factor (1.8) should be used and the local expansion factors should be circuit specific.
- We also believe that the generation capacity for local circuits should be based on either TEC or “Max TEC” over a period in order to maintain local charges in the event TEC is temporarily reduced to a lower level.

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## General Comments

We can see the benefit in moving to a system where TNUoS is split into two elements - one relating to the local assets in a zone and one the zonal TNUoS. This will enable connections that are not SQSS compliant, and have a reduced security compared to the network, to benefit from a reduced (and more cost-reflective) charge. It will also facilitate TEC sharing within a zone on a 1:1 basis without significant charging implications.

We do not believe that any of the options presented in the consultation paper will lead to improved charging and are concerned about the potential use of a local or zonal security factor – this would introduce unnecessary complication, and potential volatility, to the charging regime.

We do not support the third option of moving local assets into connections because we believe that this would unwind much of the benefit of the “plugs” methodology and would increase the barriers to market entry and exit.

## Comments on the use of Secured Load Flow

We have a concern that the first two options presented, Specific treatment of generation assets, and Specific treatment of distance to zonal hub, rely heavily on the unsecured and secured load flow at a nodal level. Nodal costs were designed to be used in the calculation of zonal prices where it was recognised that the simplifying assumptions that went in to the model would not result in significant distortion of charges. However if charges are defined at a nodal level, they are likely to be subject to distortion due to the averaging assumptions used.

For example the secured load flow is based on downrating the output of generation so that it meets demand. This assumption is possibly valid for larger zones but not for nodal points. Simply changing the flow direction of a line will change the resulting prices for secured and unsecured load flows. Thus the resulting charges at a nodal level can be affected by small changes elsewhere on the system.

The Secured SQSS assumes that the system is SQSS compliant. There are areas of the system where SQSS compliance has not been achieved either by customer choice or derogations and no account of these is taken in the modelling. Similarly there are areas where SQSS has been significantly exceeded and again these are not taken account of at a local level. The secured load flow is currently used to determine the average GB security factor and at the time it was first calculated as part of the charging regime, it was clearly recognised that it should not be used at a nodal level because of these other factors.

## Proposed solution

Of the various options proposed, we believe that a modification to the Specific treatment of distance to zonal hub should be considered. The modification would be to use the GB security factor for the local TNUoS. This is because we believe that the use of the secured load flow at a local level is not appropriate and would not produce representative results.

Connections that choose to connect without SQSS compliance would benefit by the difference between their actual security factor and the GB average of 1.8.

We believe that this system would be cost reflective, simple, transparent and easy to implement. Attempting to use a specific security factor for each generation node would not improve the current methodology and as there is no certainty that the charges would be more cost-reflective.

### TEC and CEC

We believe that TEC should continue to be the basis for charging as it is the only parameter that reflects the export capacity that is required. We recognise that in circumstances where TEC is reduced there may be merit in using "Max TEC" (i.e. the maximum TEC that has historically been contracted on a circuit) but the use of CEC is inappropriate as it relates to neither the physical circuit that has been installed nor the export capacity that has been requested. Indeed CEC is defined on a different basis to TEC (BMU and Station basis) and it is possible to have individual BMU CEC being different to the station CEC.

### Local Expansion factors

The terrain over which circuits run can affect their cost, and this should be taken account of when looking at the cost of local assets. For example urban circuits have a different cost than rural circuits driven by land and terrain cost. It is not clear whether land costs are to be incorporated in the local expansion cost.

We hope that these comments are useful

Yours sincerely

Simon Lord,  
Transmission Services Manager