

## **GB Transmission Charging: Initial Thoughts**

### **National Grid Company plc Consultation December 2003**

#### **Response by SP Transmission Limited**

##### **1 Introduction**

SP Transmission Limited (SPT) welcomes the opportunity to respond to this consultation by National Grid Company plc (“NGC”) on GB transmission charging. As a transmission owner (“TO”) under BETTA, SPT will not have a direct commercial relationship with users connected to its transmission assets. Nor will SPT have responsibility for transmission charging. Nevertheless, SPT has a significant and relevant interest in ensuring that its transmission network is developed efficiently.

The Scottish TOs will be required to support NGC as GBSO both to facilitate the introduction of GB transmission charging for BETTA and to support GB transmission charging on an ongoing basis. SPT is committed to working with NGC to ensure that BETTA is effectively and successfully delivered.

##### **2 GB Transmission Charging Issues**

###### **2.1 Equivalent and Non-Discriminatory Treatment under a GB Charging Methodology**

SPT acknowledges that the responsibility for use of system charging will be allocated to the GBSO. However, SPT has concerns about the role of NGC as GBSO in charging for connections. Although SPT will not be responsible for setting transmission charges, SPT will continue to have Licence obligations and the charging regime designed by the GBSO will impact on the ability of SPT to discharge those Licence obligations.

NGC as GBSO with an affiliated TO business will have the scope to discriminate against the non-affiliated Scottish TOs. It is therefore important that charging reforms do not prejudice competition in connections between the TOs. SPT is concerned that the charging process gives

insufficient weight to a non-affiliated TO's legitimate interests in system security and promoting network investment. The Scottish TOs' special interests must be taken into full account in the ongoing development of any GB transmission charging methodology.

It is essential that NGC complies with its current licence obligation, which will continue post BETTA go-live, to set use of system charges that shall not restrict, distort or prevent competition in the transmission or distribution of electricity. It is also a legitimate interest of SP Transmission that the GBSO, in setting GB charges, will comply with all future licence conditions. As currently drafted, the GBSO shall have an obligation to not unduly discriminate against another Transmission Licensee or unduly prefer itself over any other Transmission Licensee. GB transmission charging is one area where discrimination could manifest itself.

For example, SPT will have an obligation to plan and develop its transmission system in accordance with the appropriate planning standards. NGC will have an obligation to co-ordinate the flow of electricity onto and over the GB transmission system. Both Scottish TOs will only be able to fulfil these licence obligations if the charging regime leads to the retention and development of an appropriate and sustainable generation mix in Scotland.

From the TO's standpoint, the methodology employed in setting charges will be an important factor in enabling each TO's business to continue to offer appropriate opportunities for connection. Clearly a transmission charging structure that actively discourages connections to a TO's network could have an impact on that business' sustainability which may have adverse consequences for customers. The GBSO's charging objectives must therefore take into account the TOs' regulatory duties and facilitate the TOs' ability to discharge those obligations.

In summary, appropriate and efficient development of the Scottish TOs' networks depend upon appropriate GB-wide arrangements, including GB transmission charging, which treat all parties on an equal and non-discriminatory basis.

## **2.2 Funding for New Connections**

SPT has a particular concern over the present proposals for the commercial arrangements for new connections under BETTA. Since Vesting SPT has generally offered commercial terms to users to make up-front payments to fund the connection. This approach allows SPT to manage its cash position and has been found generally acceptable by users, particularly as it minimises the user's project risk.

The proposed commercial structure under BETTA will require a user to contract with the GBSO under CUSC terms. As noted in this consultation, the user will have flexibility in its payment arrangements with the GBSO. However, although there is no commercial relationship between the user and the TO, it is the TO that is expected to fund the connection. Under the present proposals the Scottish TOs would receive a revenue stream for the connection based on the regulatory rate of return recovered over a 40-year period.

SPT is concerned by the statement in section 2.3 that charges for connections are set at a level that enables the GBSO to recover an appropriate proportion of the costs incurred and a reasonable rate of return. This statement could be interpreted as meaning that the GBSO will levy charges on users to ensure that the Scottish TOs receive an appropriate rate of return but quoting NGC's current allowed rate of return later in the document confuses matters. SPT's view is that the GBSO should have no regulatory asset value from which a return can be derived. Only those Licensees who have invested in transmission assets should be entitled to a return. However, SPT accepts that the matter has been made complicated by the GBSO and NGC's TO business being the same legal entity after BETTA go-live.

SPT requires BETTA to substantially maintain a neutral position on a TO's cash flows and the current proposals are detrimental to such cash flows. SPT's will not enter into arrangements with the GBSO for a connection unless the commercial terms are acceptable to SPT. Resolution of this issue could require modification/s to the GB Connection Charging Methodology.

### **2.3 Government and EU Energy Policies**

In undertaking this consultation NGC as GBSO is focused solely on its licence obligations as approved by the Authority. SPT continues to stress that any transmission charging structure must promote security of supply, appropriate network investment and encourage renewable generation capacity throughout GB. However, it is also important to ensure that the GBSO's charging methodology is consistent with Government policy. Of particular importance is the balancing of the different drivers reflected in the EU directives concerning renewable generation and transmission charging. For example, Article 7(6) of the European Renewables Directive requires transmission and distribution charging not to discriminate against electricity from renewable energy sources. A holistic approach that recognises these and other government policies is a prerequisite to achieving a sustainable transmission charging model.

## **2.4 Consistent Treatment of Transmission Connected Generators**

Small generators should have equal and non-discriminatory commercial treatment under BETTA. In particular network costs faced by generators connected at 132kV in Scotland must be in line with equivalent costs faced by generators connected at 132kV in England and Wales. The overriding principle should be that there is equal nondiscriminatory treatment between generators connected at 132kV in Scotland with generators connected at 132kV in England and Wales. This must include parity of overall network costs and embedded benefits.

## **2.5 Access Rights**

NGC's comments in Section 3.2.3 that there may be issues regarding the quantity and quality of access rights in Scotland must be clarified. Ofgem<sup>1</sup> have noted that "British-wide electricity trading and transmission arrangements will ... mean that renewable and other generators, particularly in Scotland, will benefit from access to a wider British market." In particular, this requires that all transmission connected generators should have their existing transmission rights maintained irrespective of their location in GB. In England & Wales this means that Transmission Entry Capacity (TEC) should remain unchanged; in Scotland transmission connected generators, including those connected at 132kV, should have the right to agree TECs up to their present registered capacities.

## **2.6 Locational TNUoS Charges**

A key element of this consultation relates to the creation of location Transmission Network Use of System (TNUoS) tariffs. Recent Ofgem consultations on charging place considerable emphasis on GB-wide transmission charges being "cost-reflective". SPT agrees that transmission charges should be cost-reflective but continues to question whether locational TNUoS charges meet this criterion. Although there is a case for marginal cost type charging in a competitive market, the justification for marginal cost type charging in a monopoly transmission network with large sunk costs and long project timeframes is questionable. The use of marginal cost pricing must be weighed up against the importance of providing generation and load customers with a stable framework of charges against which they can take the long-term investment decisions that significant capital projects require.

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<sup>1</sup> Ofgem fact sheet 34: 7/10/2003

SPT notes the considerable variation in TNUoS tariffs detailed in the addendum to this consultation. In particular the base case generation tariff in SHETL's zone at £22.01/kW compares with £14.97/kW in scenario 4. The TNUoS approach is by its nature unstable and the information provided supports this. It is essential that moving forward from BETTA cost messages are stable and predictable.

SPT also agrees with NGC that the prospect of negative demand charges encourages inefficiencies in the affected areas through the "perverse incentive" of paying users to consume electricity at times of peak demand. SPT is concerned that the combination of negative demand charges and very high generation charges could create the potential for a major security issue in Scotland.

By adding Scotland to create a GB-wide use of system charging regime, the charging network over GB becomes far more complex. Considerable Scottish demand and generation capacity will be located north of the northern generation in England. Other complicating factors include a near doubling of the length of the transmission system, the anticipated inclusion of Scottish 132kV assets, and the inclusion of two additional transmission systems with different planning and security standards.

If locational TNUoS tariffs are to be part of the GB charging methodology then a pragmatic approach must be taken. Such an approach could include a return from multi-voltage to single expansion factors. The justification for multi-voltage expansion factors is not proven. For example, in SPT's area network expansion generally takes place at a higher voltage. From the scenarios detailed in the addendum, scenario 4 that uses a 400kV expansion factor for all GB circuits gives lower generation tariffs in Scotland. An approach such as scenario 4 that makes use of a single expansion factor and has been adjusted to avoid negative demand charges would be justifiable and pragmatic.

## **2.7 Phasing-in of Charges**

In the mid-1990's NGC phased in the implementation of locational use of system charges over a five-year period. This phasing was a necessary requirement in light of the considerable material impact faced by users in England and Wales. Similarly, if GB transmission charging under BETTA leads to a sudden material change in the overall level of transmission related charges faced by customers in the GB then phasing would also be appropriate. Without phasing there is

the potential for existing users to take business decisions that will impact on the security of the Scottish transmission system.

### **3. GB Connection Charging Methodology**

#### **3.1 Site-Specific Maintenance Charges**

SPT has indicated that, subject to agreement on cost-recovery with Ofgem, it will modify its work management system to record costs associated with site-specific maintenance on connection assets. This will ensure that site-specific maintenance cost data is consistent with NGC's own site-specific maintenance cost data and avoid having to consider the options to either (i) absorb the site-specific maintenance charge within the transmission running cost or (ii) introduce regional site-specific maintenance charges.

However, if it is considered necessary to look at other options, then of the two options proposed SPT would recommend option (i) to absorb the costs into the transmission running cost charge.

Given the lack of interest in England and Wales in making use of the contestable maintenance service, and the associated costs incurred by the TOs and GBSO in providing this service, it may now be appropriate to consider ending the contestable maintenance. This would remove the requirement for the TOs to provide site-specific maintenance charges.

#### **3.2 Transmission Running Costs**

SPT can provide the GBSO with its transmission running costs for connections thereby allowing an SPT transmission running cost factor to be defined. However, SPT agrees with NGC that TO specific factors would be complex to administer.

### **4. GB Use of System Charging Methodology**

#### **4.1 Multi-Voltage Expansion Constants**

Please note SPT's comments in section 2.6 relating to multi-voltage expansion constants.

## **4.2 Negative Demand Tariffs**

As already noted, SPT agrees with NGC that negative demand charges encourage inefficiencies through the “perverse incentive” of paying users to consume electricity at times of peak demand. The combination of negative demand tariffs and high generation tariffs in Scotland could create the potential for a major security issue.

Rather than capping demand charges, a modeling approach that leads to positive demand charges should be considered.

## **4.3 Ownership Boundary**

SPT would welcome clarification on NGC’s comments that the exact boundary for connections is “less visible in Scotland” and needs to be determined before final connection and TNUoS charges are calculated. NGC anticipates that this will be a considerable piece of work.

SPT has provided NGC with detailed information on connection assets to support this consultation. Recently SPT provided further information detailing ownership boundaries. SPT does not consider ownership boundaries to be a major issue and will work with NGC to ensure that all the boundaries are accurately defined and documented.

Ofgem’s involvement relating to ownership boundaries should be in line with its duties under the Licence when there is a charging dispute.

## **4.4 Access Rights**

Please note SPT’s comments in section 2.5 relating to access rights.

## **4.5 Transition to BETTA**

SPT confirms that for the pre-BETTA period the Scottish TOs will continue to manage their charging arrangements including any reconciliations for that period. SPT expects the final commercial transactions with its existing Interconnector users to continue for a short post-BETTA period of up to a month and so it is important that the transitional commercial arrangements take this into account.

## **5. Summary**

- Although SPT will no longer be responsible for transmission charging under BETTA, SPT will continue to have a legitimate interest in GB transmission charging. The Scottish TOs should therefore have a reasonable degree of influence in the charging process.
- SPT is committed to supporting NGC to introduce an acceptable GB Charging Methodology for BETTA.
- A pragmatic approach is required to limit change for BETTA.
- SPT will not enter into arrangements with the GBSO for a connection unless the commercial terms are acceptable to SPT.
- SPT does not regard locational TNUoS charging as “cost reflective”. If locational TNUoS tariffs are required then they should be set in a way that a) limits the increase in generation tariffs in Scotland and b) avoids negative demand tariffs.

SP Transmission Limited, 10 February 2004.