

Conclusions Report to the Authority

Modification Proposal to the Use of System Charging Methodology

UoSCM-M-13

**Introducing a new charge for
Short Term Transmission Access**

13 August 2004

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1. INTRODUCTION

A consultation document for modification proposal UoSCM-M-13 was issued on 09 June 2004. The document set out for consultation National Grid's proposal to modify the Use of System Charging methodology to include a methodology for the charging of Short Term Transmission Access. UoSCM-M-13 is consequential to a Connection & Use of System Code (CUSC) Amendment Proposal (CAP070) which is being pursued in parallel to this charging modification proposal.

Comments on the modification proposal were invited by 7 July 2004.

2. TERMS OF THE ORIGINAL PROPOSED MODIFICATION

Description of proposed modification to the Use of System Charging Methodology

National Grid proposed to change the Use of System Charging Methodology to enable it to charge for Short Term Transmission Entry Capacity (STTEC) in the event that a User submits a request for STTEC in accordance with the CUSC.

It was proposed that a daily STTEC charge for generation in positive TNUoS tariff zones be based on 90% of the zonal tariff pro-rated over a winter period of 120 days, with a zero charge for generation in a negative tariff zone.

This is expressed in the following formula:

$$\frac{FT_{Gi} \times 0.9 \times STTEC \text{ Period}}{120} = \text{STTEC tariff } (\text{£/kW/period})$$

Where:

FT	=	Final annual TNUoS Tariff expressed in £/kW
Gi	=	Generation zone
STTEC Period	=	A period applied for in days as defined in the CUSC

It should be noted that the marginal infrastructure costs incurred in terms of the investment to provide STTEC are zero as it would only be allocated if capacity is available on an economic basis. However, we believe that STTEC should be charged at a level that would not undermine TEC as the primary product for gaining access to the system and securing the associated investment signal.

For the avoidance of doubt, STTEC would not be used in the DCLF transport model. TEC data is included in the DC load flow (DCLF) transport model for the purpose of tariff setting and it is not proposed to change this process as a result of this consultation.

The proposed new text for The Statement of the Use of System Charging Methodology can be found in Appendix 2 of this document.

The proposed fee may be found in the proposed drafting of the Statement of Use of System charges in Appendix 3 of this document.

Explanation of the issues**Background to the Issue**

National Grid proposed a CUSC Amendment Proposal CAP070¹ Short Term Access Service in January 2004. On 19th February 2004, we presented an indicative charging methodology for STTEC at the Transmission Charging Methodology Forum (TCMF). At the May 2004 CUSC Panel meeting a decision to take the original Amendment and the Working Group Alternative to Industry consultation was reached.

Charging methodology consultation UoSCM-M-13 is consequential to CUSC Amendment Proposal CAP070.

Explanation of the Issue:**Introduction of Short Term Transmission Entry Capacity (STTEC)**

At present a breach of TEC is a breach of CUSC and also a breach of the Generator's licence, however, it is not a breach of CUSC if a generator is entitled to exceed TEC under specific circumstances laid out in the CUSC.

Circumstances may arise where it is considered beneficial, both commercially for the respective parties and to enhance system security, for the generators to increase their access to the system. In order to benefit the wider system and to facilitate the return to service of otherwise unavailable plant, the introduction of a short term access product has been proposed by National Grid in CAP070. This new short term product would effectively increase a generator's access to the system for a defined period and is described as STTEC (Short Term Transmission Entry Capacity).

Two options were described within the CAP070 Working Group report, in which the STTEC period, or length of the product, varies between 4 and 6 weeks. In addition the report reflected National Grid's initial thoughts on a charging methodology where the charge for STTEC in positive charging zones should be based on a proportion of the annual TNUoS charge, whereas, in negative zones a charge of zero would apply.

¹ CAP070 Amendment Proposal, Working Group Report and Amendment Report are available on the CUSC website at www.nationalgridinfo.co.uk/cusc/

Justification for proposed modification

The proposed modification would better meet the Relevant Objectives in Licence Condition C7A 5(a), (b), and (c) of:

- facilitating effective competition in the generation and supply of electricity and (so far as is consistent therewith) in the sale, distribution and purchase of electricity;
- levying charges which reflect, as far as reasonably practicable, the costs incurred by National Grid in its Transmission Business; and
- taking account of the developments in National Grid's Transmission Business.

The modification will achieve these objectives in the following manner:

- by ensuring appropriate treatment between Users incurring TNUoS generation charges;
- by ensuring that TEC remains the primary basis for TNUoS charges levied to gain access to the system and that STTEC charges do not undermine the investment signal derived from the demand for TEC;
- by levying a cost reflective STTEC application fee;
- by ensuring charging methodologies reflect developments within National Grid's Transmission Business i.e. CUSC Amendment Proposal CAP070.

Suggested alternatives

Three alternative approaches were received from a number of different respondents following National Grid consultation on UoSCM-M-13:

- i) The STTEC charge should be based on an average of all TNUoS generation zone tariffs and prorated to the STTEC period granted (submitted by two respondents).
- ii) The STTEC charge should be based on the peak cost and not pro-rated over the winter period, multiple requests for STTEC would each incur the same charge (90% of the annual TNUoS charge) and regardless of the period requested. The STTEC charge should also include the 10% (prorated) of annual transmission charges not attributable to the provision of winter peak capacity (submitted by two respondents).
- iii) The STTEC charge should be based for non-winter usage on the 10% of annual transmission charges not attributable to the provision of winter peak capacity (submitted by three respondents).

National Grid has responded to these suggestions within Section 3.2 of this document. The final proposal has not been amended as a result of these suggested alternative approaches.

Implementation date

This modification is proposed for implementation for the 2004/05 winter and is dependent upon completion of the associated CUSC governance process for CAP070. It should be noted that under licence condition C7 5(a), 150 days notice to the Authority of any proposal to change the use of system charges is required. Additionally, the CUSC, under Section 3.14, requires National Grid to provide Users with 2 months notice of any revised TNUoS charges. National Grid believes that implementation of this charging methodology proposal and TNUoS charges may require the Authority to waive the above notice periods. Consequently, the following implementation dates are proposed.

- Where the Authority does not waive the 150 day notice period, implementation of the STTEC charge is proposed for 1 February 2005 with the STTEC application fee being effective from 10 January 2005.
- Where the Authority waives the 150 day notice period but not the 2 month notice period, implementation of the STTEC charge is proposed for 1 December 2004 with the STTEC application fee being effective from 10 November 2004.
- Where the Authority waives both the 150 day notice period and 2 month notice period, implementation of the STTEC charge is proposed for 1 November 2004 with the STTEC application fee being effective from the day after the day on which the Authority makes its decision.

We believe that the benefits of an earlier implementation would outweigh the dis-benefits of a shortened notice of the charges to apply. This will effectively be a new charge with a limited application in winter 2004/05 since the applicable TEC values are already registered. The application fee would need to be implemented prior to the STTEC charge.

Proposed changes to the Statement of the Use of System Charging Methodology

It is proposed that the Statement of the Use of System Charging Methodology should be modified in line with the text contained within Appendix 2 of this report. Appendix 2 contains the proposed methodology for the charging of the Short-Term Transmission Access product along with the related application fee. Modification would be required to Chapters 3, 5, 7 and appendix TN-6, along with insertion of a number of Glossary terms.

Proposed changes to the Statement of Use of System Charges

It is proposed that the Statement of Use of System Charges should be modified in line with Appendix 3. It should be noted that, if implemented, the final change to Schedule 1 would be dependent upon whether the CUSC Amendment Proposal (CAP070) or the Working Group Alternative Amendment is approved. Approval of the Amendment Proposal (CAP070) would require one column (28 days) of STTEC charges. Approval of the Working Group Amendment Proposal would require three columns (28, 35, & 42 days) of STTEC charges.

Impacts on existing Use of System charges

It was not proposed as part of this charging methodology modification proposal to amend existing Use of System Charges. Any charges levied for STTEC will impact on TNUoS revenue recovery, and this may affect the level of charges set in subsequent periods, however, this effect is not expected to be significant.

Impacts on other Industry Documents

A CUSC Amendment Proposal (CAP070) has been proposed which is aligned to this charging methodology proposal. The CUSC proposal, if implemented, would define the Short Term Transmission Access Service along with the requisite rules for the application and operation of the service.

3. RESPONSES TO THE MODIFICATION PROPOSAL

Comments and views were invited on the UoSCM-M-13 Charging Modification Proposal. National Grid received nine responses to this consultation paper along with a number of charging methodology comments as part of the consultation on CAP070. None of the responses were marked as confidential, and copies of the responses are contained within Appendix 1 of this report.

None of the respondents supported the Short Term Transmission Access charging methodology, however, opinion was split as to whether STTEC charges should be higher or lower.

3.1 Support for the proposal

Four respondents considered that there was merit in developing short-term or more flexible transmission access arrangements. One respondent considered it important that mechanisms be developed to allow low load factor plant to respond to market signals at times of system stress.

It should be noted that the majority of respondents were not in favour of the CUSC Amendment Proposal CAP070. Charging methodology proposal UoSCM-M-13 is consequential to the Short Term Transmission Access service proposed within CAP070.

The majority of respondents objected to the charging methodology proposed for STTEC within UoSCM-M-13, but the grounds for rejection differed from cost reflectivity, interactions with the annual TEC product, and whether the methodology facilitated competition in the generation of electricity.

3.2 Issues Raised

Cost Reflectivity

Eight respondents stated that the proposed charge for STTEC was not cost reflective. Three respondents expressed concern that the proposed level of STTEC charge seemed set entirely to protect TEC, and one of these respondents suggested the resultant STTEC charge was excessive. One respondent argued that the probability of system peak was not uniform across the peak capacity period identified by National Grid and that it was therefore wholly inappropriate to prorate STTEC charges as proposed within UoSCM-M-13.

Four respondents suggested alternate approaches. Two considered that STTEC should be based on a national average of generation tariffs to avoid geographic discrimination where marginal costs were common. Two respondents considered that the charge should be based fully on peak capacity costs for each capacity period requested rather than costs pro-rated over a winter period since these costs were based on capacity magnitude rather than duration.

Two respondents considered UoSCM-M-13 did not properly reflect the differences between TEC and STTEC.

Five respondents expressed concern that the proposed STTEC charging methodology had the potential to reduce TEC registration in favour of the short term

product. Generally these respondents noted potential detrimental impacts to locational investment signals, the balance of charges between TEC & STTEC, and available plant margins. However, one respondent considered that Users would be unwilling to give up firm access where access to STTEC was uncertain, and unless generation was uneconomic against the full year TNUoS costs.

Five respondents did not consider it cost reflective to apply the proposed STTEC charge at the same rate throughout the year. Three of these respondents suggested that the 10% of annual transmission charges not attributable to system peak should form the basis for the STTEC charge outside of the winter period. The respondent supporting a STTEC charge based on an average of generation charges considered that approach would be appropriate regardless of peak / off-peak conditions.

Two respondents expressed a view on whether STTEC should be included within National Grid's DC Load Flow (DCLF) transport model. One did not consider it appropriate to include STTEC within DCLF. One respondent considered that STTEC should be included in DCLF on the basis that exclusion would create an incentive to manipulate TEC and potentially distort locational differentials.

National Grid Response:

As stated within consultation paper UoSCM-M-13, National Grid has an obligation to consider the level of charge for STTEC in the wider context of how this proposed charge would interact with the primary TEC product. Whilst we noted within the consultation paper that the marginal cost of STTEC may be at, or near to, zero, we placed this within the wider consideration that the level of STTEC charge should neither undermine the annual TEC product, nor set an inappropriately high STTEC charge that would discourage application for the service.

National Grid does not believe that there will be significant migration from TEC to STTEC as a consequence of the proposed charging methodology. We would therefore expect TEC to remain as the primary means for gaining access to the system for most generators. Clearly, under the CAP070 proposal, a User would have no guarantee that having withdrawn its plant that the Short Term Transmission Access product would be available as an alternative to TEC. Consequently, we expect that the majority of User's would continue to register TEC values consistent with their intended usage. The STTEC product would help Users respond to business opportunities and market signals by allowing them to secure incremental access to the transmission system. Naturally we would expect to monitor User TEC registration over time to ensure our charging methodologies are consistent with our relevant licence objectives.

The two alternate methods of setting the STTEC charge would have the effect of either setting a very much higher STTEC charge (based on a full 90% peak cost for each STTEC application) or setting a significantly lower STTEC charge for most generation zones (based on an average of generation zone tariffs). National Grid is of the opinion that neither of the contrasting approaches presented by respondents would deliver the objectives of an accessible STTEC service and robust annual TEC regime. We believe that they would tend to reinforce one or the other of these products. Having considered the above approaches, and being mindful of User concerns in respect of potential migration from TEC to STTEC, National Grid remains of the view that the charging methodology modification proposed within UoSCM-M-13 is consistent with our relevant transmission licence objectives, as described within Section 5 of this document.

National Grid does not agree with the respondents that suggested a different charge structure should apply for STTEC requested outside of the winter period. As noted above, the STTEC charging methodology should not undermine primary access to the system through the TEC product. Given that TEC is an annual product, charging at a 10% level of the TNUoS generation tariff for each STTEC period requested outside of winter would potentially enable User's to gain back-to-back STTEC access to the transmission system at a charge significantly below the annual TEC charge.

Of the two respondents that commented on the inclusion of STTEC within the DCLF transport model, we agree with the respondent that suggested STTEC be excluded from the model. The DCLF tool models the impact of User's intended usage of the transmission system, based on their TEC which they submit, for tariff calculation purposes, before November in the year preceding the charge year. Since the DCLF transport model provides forward looking locational investment signals, it would not be desirable or practical to include an assessment of potential short term transmission access given the level of uncertainty that would naturally be associated with any STTEC forecast.

Facilitating Competition

Five respondents raised a concern that the proposed charge for STTEC was discriminatory in its effects between different classes of system User. Four of these respondents considered that those generators able to apply for the STTEC product would secure system access at a lesser charge than TEC, and that the possible migration from TEC could increase unit costs for those baseload generators still registering a TEC. One respondent suggested that inconsistent treatment between negative and positive charging zones did not serve to protect charge reflectivity and locational investment signals.

One respondent questioned why a User requesting STTEC for greater than 5 months within a year should be exposed to charges greater than would be payable had the User requested TEC.

One respondent felt it was unclear whether the proposed Short Term Transmission Access product and associated charging mechanism would encourage mothballed plant to return or encourage existing plant to withdraw in favour of STTEC. The same respondent suggested the proposal could encourage certain User's to rely on STTEC such that they may not be available at times of unexpected system stress i.e. summer.

One respondent felt that a cost reflective STTEC charge could not realistically be derived and therefore any STTEC charge would have the potential to distort prices. The same respondent noted that the application fee would not prevent a User from requesting multiple blocks of STTEC to prevent access by other Users. This respondent considered that certain User's, with sufficient market power, could potentially exploit this approach with the intent of distorting market prices.

National Grid Response:

As noted on page 8 of this document, National Grid does not believe that with the proposed STTEC charge there will be a significant migration from TEC to STTEC, or that STTEC will become the primary means by which Users gain access to the

transmission system. Consequently, we anticipate aggregate registered TEC levels to remain largely unchanged as a result of this proposal with no significant re-balancing of charges between annual and short term transmission access products. Naturally given the diverse nature of generation plant, certain Users may be more able to respond to market signals and, the CAP070 proposal enables such Users to respond accordingly whilst not paying proportionally more than other generators sited within the same generation zone. National Grid therefore considers that charging methodology proposal UoSCM-M-13 does not discriminate between Users.

Negative TNUoS generation charging zones are charged differently from positive TNUoS generation charging zones. National Grid considers that a negative STTEC charge may incentivise STTEC over TEC within negative charging zones, as discussed within UoSCM-M-13. A zero charge would avoid this situation arising and additionally would not act as a barrier to User application for STTEC. It is not an objective of the proposed STTEC charging methodology to provide a locational investment signal; rather that it does not undermine the ability of the primary access product to fulfil this role.

National Grid considers that Users requesting multiple periods of STTEC should be incentivised to access the transmission system through the primary TEC product. It is therefore appropriate that, at a point, aggregate charges for multiple applications of STTEC should exceed the annual TNUoS charge for TEC.

National Grid would expect to monitor levels of User registration of TEC and User application for STTEC in order to ensure that the charging methodology remains appropriate for the transmission business.

Application Fee

One respondent commented on the proposed application fee, this respondent did not believe there were any issues arising from the derivation of the application fee as described within the proposal.

National Grid Response:

As noted within the proposal, it is National Grid's intention that the application fee should reflect the costs involved in processing each STTEC application.

CUSC Amendment Proposal CAP070

One respondent expressed disappointment at the lack of a forum to discuss both CAP070 and UoSCM-M-13.

One respondent suggested a limit on STTEC application of 26 weeks within a year be adopted to prevent User's abusing the short term service.

Two respondents challenged the usefulness of the Short Term Transmission Access service. One respondent considered the Working Group Amendment Proposal to be less useful, given the shorter application period than the CUSC Amendment Proposal CAP070.

National Grid Response:

National Grid recognises that the governance arrangements are not ideal in that they can lead to this type of cross-code issue. However, although they could not form part of the Terms of Reference, extensive discussion on charging issues did take place at the CAP070 Working Group and similar points were made at the CUSC Panel in receiving the CAP070 Working Group Report. In the future, we would consider establishing separate charging working groups to run in parallel with the CUSC working group for any related development.

A number of respondents provided comment, as part of UoSCM-M-13, on the structure of the Short Term Transmission Access product, as described within CAP070. We are not able to address these comments as part of this charging methodology modification proposal but note that the CAP070 Amendment Report addressed similar concerns raised within the CAP070 consultation process.

Other

One respondent suggested that deep connection charging was the only methodology that would deliver a true marginal cost, although this respondent recognised this was not viable given resistance in “some quarters” to this approach.

A number of worked examples were provided by one respondent, these hypothesised User behaviour under a regime that included a Short Term Transmission Access service. The respondent used this position to suggest that peak plant Users would prefer STTEC over TEC such that TEC became an unreliable guide to the likely level of system usage and to the detriment of security of supply.

One respondent suggested that any STTEC revenue should be refunded uniformly back to Users with TEC as part of the generation reconciliation process. It was argued that this revenue should be targeted to generation rather than demand, and that this mechanism would place an incentive on Users to register TEC rather than STTEC to be eligible for the refund.

National Grid Response:

Connection charging is not within the scope of this charging methodology modification proposal, and we note that the current connection arrangements were approved by the Authority in December 2003

National Grid notes that the examples provided by one respondent of User behaviour in an access regime that includes STTEC are necessarily simplistic and based on the opinion of that respondent. National Grid has stated that the charging methodology for STTEC should not undermine the annual TEC product, and in this respect we consider the current proposal to be appropriate. We would expect to monitor registration of TEC and applications for STTEC to ensure the regime delivers appropriate investment signals whilst allowing short term access, where available, to the transmission system in line with our relevant objectives.

We do not believe that there are any grounds to warrant a targeted refund of the income from STTEC only to generation with TEC. Furthermore any mechanism which achieved such an objective would be unnecessarily complex compared with

the small amounts relative to overall TNUoS revenues. As the amounts are likely to be small, and with a fair degree of associated uncertainty year on year, we do not agree that returning STTEC revenue to generation would incentivise Users to hold TEC. We therefore believe it is appropriate to deal with any variations in income as a result of the STTEC charges across both generation and demand, within the general TNUoS revenue recovery mechanism.

4. CHANGES TO THE PROPOSAL IN LIGHT OF REPRESENTATIONS MADE

The proposal is unchanged from the consultation document issued on 9 June 2004.

5. HOW THE PROPOSED MODIFICATIONS BETTER MEET THE RELEVANT OBJECTIVES

The proposed modification would better meet the Relevant Objectives in Licence Condition C7A 5(a), (b), and (c) of:

- facilitating effective competition in the generation and supply of electricity and (so far as is consistent therewith) in the sale, distribution and purchase of electricity;
- levying charges which reflect, as far as reasonably practicable, the costs incurred by National Grid in its Transmission Business; and
- taking account of the developments in National Grid's Transmission Business.

The modification will achieve these objectives in the following manner:

- by ensuring appropriate treatment between Users incurring TNUoS generation charges;
- by ensuring that TEC remains the primary basis for TNUoS charges levied to gain access to the system and that STTEC charges do not undermine the investment signal derived from the demand for TEC;
- by levying a cost reflective STTEC application fee;
- by ensuring charging methodologies reflect developments within National Grid's Transmission Business i.e. CUSC Amendment Proposal CAP070.

6. TIMETABLE FOR IMPLEMENTATION

National Grid understands that Ofgem's GB consultation in respect of CAP070 will close for industry representations on Monday 16 August 2004. This charging methodology conclusion report has now been issued for review by the Authority, and a decision, within the 28 day review period required by National Grid's transmission licence.

National Grid considers that the relevant objectives would best be served by

implementation as proposed, and that the Statement of the Use of System Charging Methodology should be modified for STTEC charging with effect from 1 November 2004. As noted previously, the STTEC application fee should be implemented on the day following a decision by the Authority in order that the STTEC service may start from 1 November 2004. This timescale is dependent on the Authority waiving the requirement that National Grid provide both the 150 day notice to the Authority of a proposal to change use of system charges, and the 2 month notice to User's of revised TNUoS charges. Other implementation dates are proposed on page 7 of this document where the Authority does not waive the requirement that National Grid provide notices of use of system charge change.

APPENDIX 1 – RESPONSES TO MODIFICATION PROPOSAL

Edison Mission Energy

UoSCM-M-13 Charges for Short Term Transmission Access

Thank you for the opportunity to comment on the above consultation. Whilst we support the introduction of Short Term TEC we believe that the charging proposals contained in UoSCM-M-13 fall short of those needed to ensure the successful development of this new product.

STTEC is fundamentally a different product to TEC. It is designed to be used by generation (often located in expensive TNUoS zones) by providing a charge for short use periods that will facilitate its profitable return to service at times of system stress. This should improve the efficiency of the market in responding to market signals (currently, low load factor plant that may expect to run for only a few days per year, is required to commit to a full year's TNUoS charge against a very uncertain volume and price) and has the potential to deliver benefits to NGC and consumers.

However, it is critical that the associated charging structure does not undermine these potential benefits and provides a meaningful alternative for market access to low load factor plant.

Within the NGC proposals it is stressed that any charging methodology for STTEC should not "disincentivise use of the primary TEC product." The proposed solution uses very high STTEC charges in order to achieve this (2.74 times the applicable zonal annual charge over the year as a whole.)

First Hydro believes that this is excessive and unnecessary. It is also not consistent with cost-reflectivity objectives - NGC state that the marginal infrastructure costs of providing short term access is zero, as STTEC would only be allocated if capacity is available on an economic basis.

Securing STTEC is in itself an uncertain process, particularly where competition for access exists on the network. Unless generators are clearly uneconomic against the full year's TEC charge, they are unlikely to want to give up their ongoing firm access rights – in other words there is significant value in preserving rights under the annual TEC process, and TEC will always remain the primary product.

Should NGC have any residual concerns that TEC might be undermined in some way, then we would propose that rather than imposing a premium on the price of 'genuine' short term access, other mechanisms are examined. For example, it might be worth restricting applications for STTEC for any station to, say, 26 weeks in each charging year. Any access required beyond this point would therefore need to be requested as TEC rather than STTEC, incurring the full annual zonal charge.

In terms of the STTEC charge itself, we believe that it should be based on the average generation TEC-based charge (approximately £4/kW over the full year). This method does not discriminate geographically as the costs of providing short term access is in all cases the same. For the reasons outlined above, we do not believe that this would discriminate against those parties securing access under TEC.

The current proposals provide a high flat charge, irrespective of the time of year. If plant were needed during the March to October period (as was seen last Summer the

need for plant is not limited to November to February) STTEC under the proposed charging arrangements, would be unlikely to encourage plant returns. In order to maintain cost-reflectivity, it is clear that off-peak charges should be much lower. We propose that STTEC charges should be profiled 90% winter (November –February) and 10% over the rest of the year.

We believe that this approach would deliver more appropriate, cost reflective short term charging, that will actually deliver real benefits to the market, without providing perverse signals to the vast majority of generators that would expect to secure access via TEC.

I trust that these comments will prove useful to NGC as it continues to develop its charging ideas for STTEC.

Yours sincerely
Simon F Lord

Powergen

CUSC Amendment CAP070 and Use of System Charging Methodology Modification Proposal UoSCM-M-13, Short Term Transmission Entry Capacity

I am responding on behalf of Powergen to the above two consultations regarding the proposal to create a Short Term TEC (STTEC) product. We do not support the proposal as we believe that it will set an inconsistent and discriminatory structure for charging entry capacity and will not form a product which will be useful for the majority of generators.

In considering whether the proposal for a STTEC should be implemented it is essential that the definition of the product and its associated charge are considered together. Therefore, this response covers the consultation regarding CUSC Amendment CAP070 as well as UoS Modification Proposal UoSCM-M-13. A copy has been sent to the appropriate contacts for both consultations.

Consistency of Charging and Discrimination

The present charging basis for Transmission Entry Capacity (TEC) means that generators are charged TNUoS on the maximum output that they expect to achieve during a year regardless of when and for how long this will occur. Therefore, although a generator may only generate at this output for a short period of time, such as for a few days, it will attract the same charge as capacity which is used for a longer period of up to a year. Therefore, TEC charging is based on an instantaneous maximum output value and is not affected by the duration during the year for which the TEC is required.

The proposed STTEC product breaks away from this charging principle by charging a proportion of the TEC charge in relation to the length of STTEC required. The justification for this is that NGC believes that around 90 percent of system costs are necessary to meet the maximum useage of the system during the winter period of roughly 120 days duration. Therefore, the STTEC charge is calculated as a proportion of this.

The effect of this difference in charging principles means that generators who are generating for a short period under a TEC will pay a higher charge than those who do so under a STTEC. For example a generator generating for one month under a TEC would be exposed to five times the cost that an equivalent generator generating under a STTEC. Clearly this means that the proposed charging methodology discriminates in favour of those generators who wish to generate for short periods under a STTEC. It has been argued that this is justified as TEC allows a generator to generate at any time of the year and provides it with the option to acquire the same level of TEC in the following year (on payment of the relevant TNUoS charge for that year). However, no explanation has been given to explain how much of the charge these benefits represent. The above example would suggest that they are worth four times the STTEC charge itself which appears extraordinarily high for an option premium.

Conversely, if a generator were to generate for any period of 5 months or more under a STTEC, it would be worse off than if it did so under a TEC. Why is STTEC suddenly more, rather than less, valuable than TEC in these circumstances? Again, no clear justification has been given for this. Worked examples illustrating these effects are shown in the appendix to this response.

Clearly, the charging arrangements for TEC and those proposed for STTEC are inconsistent meaning that both cannot be cost reflective. Not only does this lead to discrimination between users who use short term TEC compared with those who cannot make use of the product, it also distorts the cost signals to generators using the transmission system, particularly at peak times. Such inconsistent messages would appear to run contrary to promoting competition in generation or the efficient use of the transmission network.

Usefulness of the STTEC Product

We believe that the STTEC products which have been defined in the original and alternative amendment proposals will be of little use to the majority of generators. It would certainly not provide a product which could support the return of a generating unit from mothballing. The original proposal provides generators with a product of maximum length six weeks with four week's notice of whether the capacity will be made available. Not only does this represent short notice for a generator to bring back a unit, it also does not provide the certainty that capacity will be made available for a sufficiently long period to make it worthwhile to do so. Under the proposal, if a generator wants capacity of longer duration than four to six weeks it will have to apply for sequential STTECs. However, the generator will not know that the second slot of capacity is available until it has started using the first slot of STTEC. It is doubtful a generator will bring back a unit when it does not know it will be able to secure the capacity for the whole period it wished to generate for.

The alternative proposal is actually less useful for the majority of users, although it may prove beneficial for a limited specific subset of generating units. A product which would be more usable by generators wishing to return units from mothballing was proposed as part of the CAP070 working group process. However, our misgivings on the discriminatory nature of the proposal outlined above led us to decide not to pursue it further.

In summary, we believe that the proposals should not be implemented as they would lead to an inconsistent charging regime which would be detrimental to competition in generation and the efficient use of the transmission network. Additionally, we do not believe that the STTEC product will be useable by the majority of generators, exacerbating its discriminatory nature and would therefore not provide a product which effectively improves system security.

Yours sincerely,

Paul Jones
Trading Arrangements

[Powergen's] **Appendix 1 – Worked examples of effect of TEC and STEC on charges**

Shorter periods

Say a generator wishes to generate an additional 100MW for a month. To do so under a TEC would cost an additional amount proportionate to the TNUoS rate in its zone as follows:

$$\text{TEC Cost} = \text{TNUoS rate} * 100,000\text{kW}$$

Under a STTEC the cost would be as follows according to the methodology in UoSCM-M-13:

$$\text{STTEC Cost} = \text{TNUoS rate} * 100,000\text{kW} * 0.9 * 28\text{days}/120\text{days}$$

The STTEC cost is the same as the TEC cost multiplied by $0.9 * 28 / 120$, or 0.21. This means that generating under a STTEC would cost just over a fifth the cost of doing so under a TEC.

Longer periods

Say a generator wishes to generate an additional 100MW for a period of seven months. To do so under a TEC would still cost an additional amount proportionate to the TNUoS rate in its zone as follows:

$$\text{TEC Cost} = \text{TNUoS rate} * 100,000\text{kW}$$

Under a STTEC the cost would be as follows according to the methodology in UoSCM-M-13:

$$\text{STTEC Cost} = \text{TNUoS rate} * 100,000\text{kW} * 0.9 * 196\text{days}/120\text{days}$$

The STTEC cost is the same as the TEC cost multiplied by $0.9 * 196 / 120$, or 1.47. This means that generating under a STTEC would cost just under one and a half times the cost of doing so under a TEC.

British Energy

Use of System Charging Methodology Modification 13: Introducing a New Charge for Short term Transmission Access

Thank you for the opportunity to comment on this Use of System Methodology Modification.

British Energy does not support either the associated CUSC Amendment Proposal or it's alternative. This response does not prejudice that view but will deal with the technical details were either of these proposals to be put into place.

This Modification proposes to change the Use of System Charging Methodology to allow National Grid to charge for additional short-term capacity in the event that a User submits a request for STTEC in accordance with the CUSC.

In order to determine the charge for the STTEC product, it is necessary to consider the relevant licence objectives as set out in licence Condition C7A. Objective (b) which requires the licensee to have in place a use of system charging methodology which reflects the costs incurred by the licensee in its transmission business is particularly relevant in determining the charge for STEC.

British Energy consider that under the present charging regime TEC should remain the primary product for gaining access to the system and consider that STTEC, as an incremental addition, is unnecessary. However should such a product be made available any charge for it would need to ensure that Users are not disincentivised from using the primary TEC product and should as noted above properly reflect the marginal costs the user is imposing on the transmission system. As proposed we consider that the introduction of STTEC will discriminate against holders of TEC and introduce commercial incentives not to submit a reflective TEC.

The introduction of STTEC will not as seems to be suggested facilitate effective competition. As proposed it will simply be another way for certain classes of generator to avoid paying the appropriate use of system charges thereby creating an anti-competitive cross subsidy.

Positive Generation Charging Zones

We disagree with the approach suggested here and instead offer an approach that better fulfills the relevant licence objections.

National Grid claim that their methodology has attributes *'to ensure the granting of STTEC to a generator does not result in access to the system at a cost below any other generator in the same TNUoS generation tariff zone.'* If true, this is indeed an appropriate approach to adopt, as it will facilitate competition by ensuring a level playing field for all transmission connected generation. However previous analysis in charging Modification UoSCM-M-11 showed that 90% of the annual charge was attributed to the peak capacity of the network, not the time over the peak period as suggested in this consultation. . It was stated by NGC that the justification for UoSCM -M-11 as stated in the final consultation published on 12 September 2003:

" 6.2. Justification for proposed modification

The proposed modification would better meet the Relevant Objective in Licence Condition C7A 5(b) to reflect the costs incurred by National Grid in its transmission business in the following way:

*??By better reflecting the fact that c.10% of incremental investment in transmission assets is driven by year round conditions, rather than **system demand peak or peak generation capacity***

National Grid believes this modification is non-discriminatory, with respect to any specific user or class of users, in accordance with Licence Condition C7C."

Therefore generators acquiring STTEC over the peak period (assumed to be November to February) should be required to pay the full 90% of the annual TNUoS charge regardless of the length of period for which they hold STTEC, plus an additional weekly charge of 10% multiplied by 7/120. If the peak period is considered to be November to February inclusive (a period of 120 days) then this weekly charge will be the time based element of TEC that National Grid said existed in the previous UoS-M-M 11. This method of derivation of a STTEC charge would properly reflect the marginal costs the user is imposing on the transmission system and the costs imposed by the user on the transmission system.

Application Fee

British Energy sees no issues arising from the derivation of the application fee.

Summary

British Energy considers that the effect of the CAP070 amendment and the alternative outlined within this consultation by National Grid will be harmful to competition be discriminatory and does not result in cost reflective charging and hence is economically inefficient. The approach we have outlined above better meets all of the objectives and we would urge NGT to consider it.

As regards the changes proposed to the Methodology Statements to accommodate the CAP070 Amendment and the alternative these seem appropriate.

Regards

Gayle Cairns

Trading Consultant

British Energy Power and Energy Trading

Centrica

UoS-M-13 Introducing a new charge for Short Term Transmission Access

Centrica welcomes the opportunity to comment to National Grid on the above charging methodology proposal.

We are disappointed that the charging structure for this product was not (and could not) be discussed at the working group meetings set up for the CAP070 amendment. We suggest that an integral part of this proposal is the charge that is levied for it. We believe that sufficient care needs to be taken in setting the tariff so that the STTEC product is taken up in reasonable levels, but not too high a price to prevent usage and not too low so that it results in a general replacement of TEC. In addition to this, we suggest there are currently many proposals within the area of Transmission Access that are being discussed and consulted upon on an ad-hoc basis. We suggest that an overall plan should be published to ensure these parts are discussed as part of this plan and therefore against the wider picture. We are very concerned that there are no current industry discussions on the wider plan and no arena in which the industry can discuss these issues. This, we believe is unacceptable.

We also suggest that it is very short sighted to price this product on a winter basis only (applicable for the whole year) as this charge cannot be representative of the costs incurred by National Grid within the summer months and therefore is in direct contravention of the applicable objectives.

We therefore do not support the implementation of this proposal as we suggest that industry discussion needs to play a more involved role in this particular case and we do not believe that the charges proposed reflect the costs incurred by National Grid in it's Transmission business.

Please contact me if you have any queries regarding these comments.

Yours sincerely,

Sarah Owen
Commercial Manager
Centrica Energy

EDF Energy

UoSCM-M-13: Introducing a new charge for Short Term Transmission Access

EDF Energy are pleased to have the opportunity to comment on the proposed modification to the Use of System Charging Methodology.

EDF Energy believe that there is scope for greater flexibility in the arrangements for access to the transmission system such as short term or longer term access products. However, any such developments must take into account the nature of the investment costs associated with the transmission infrastructure which are, according to National Grid, at least 90% driven by capacity requirements at system peak conditions and which are undertaken on a long term basis.

We believe that in a shallow connection environment there needs to be the incentive for the majority of transmission users to contract for transmission access on a long term basis (i.e. at least annually) in order to provide clear long term investment signals to NGC. The risk with short term access products is that they could create an incentive on participants to reduce their annual firm TEC and top up with additional STTEC only if the market conditions are favourable. This could result in misleading investment signals to National Grid and higher costs per kW for firm annual TEC.

We believe that the proposed modification to the Use of System methodology would reduce the cost reflectivity of transmission charges by introducing a separate layer of charges for use of the system that potentially undermines the incentive on Users to contract annually for access to the system and that obscures the investment signals provided to NGC and the industry. We do not believe that the proposed change would better facilitate competition in generation as it would reduce the costs of using the transmission system in the short term at the expense of long term users of the transmission system. This would in our view be discriminatory and therefore anti-competitive.

We hope that you will find these comments useful. If you have any queries please contact me on 0207 752 2526

Yours sincerely

Rupert Judson
Transmission Infrastructure
& Development Manager

EDF Trading

UoSCM-M-13: Introducing a new charge for Short Term Transmission Access

Please find herewith, the response made on behalf of EDF Trading Ltd and EDF (Generation) to the UoSCM-M-13 consultation on Introducing a new charge for Short Term Transmission Access, that is complementary to the CUSC Amendment Proposal CAP070.

As mentioned in the CAP070 response, we are in principle in favour of there being some sort of short term transmission access product existing within the general and more long term framework. This would clearly add more flexibility and potential opportunities for parties to operate in the market in timescales other than on a continuous basis. However, we also believe that transmission charges should be as cost reflective as possible and we are not convinced that the proposals put forward under UoSCM-M-13 are indeed cost reflective. Arguably, the marginal investment costs for short term access are zero, especially as it would only be allowed if it incurred zero constraints costs (a trigger for transmission investment?).

It is maintained, although never fully explained, that 90% of the transmission costs can be attributed to the assets needed for Winter demand and that the short term access product should therefore be based on 90% of the annual TEC charge. The argument for using this (long term usage) level is more about being penal, to avoid undue behaviour, but it is difficult to be convinced that it is cost reflective. Even if this were to be the case and it was reasonable to apportion such an amount over the four months of the Winter period (Nov-Feb) as proposed, then surely it can not be cost reflective to charge at the same level for its use during the Spring, Summer and Autumn. We would understand better if it was also proposed to charge at a proportion of 10% for the remainder of the year, to be consistent with the 90% period, or for the Short Term product to be restricted to only the Winter period, on the basis

maybe that it is a product that is only regarded as having value at that time (for plant margin reasons) but, because of cost reflectivity (?), it has to be charged at the 90% level.

Notwithstanding the above, we are also concerned that, should the charges be too low, parties with long term access will be charged more for their product in order to provide access for the 'moth-balled' plant coming on only for the short period. It could also provide perverse incentives that lead some parties moving away from the longer term product; again impacting on those that are left. Whatever is agreed, the above needs to be fully considered and the impacts need to be monitored and kept under review.

As a consequence we believe the charging regime proposed under UoSCM-M-13 is not cost reflective and has the potential of being unduly discriminatory, both in favour of those parties who take up such an offer as allowed under CAP070 and against those who have to bear the full costs of the transmission system.

We also believe that the problem of finding a suitable product and charging regime within the existing framework is a further symptom of the continuing insistence on using anything other than a 'deep-entry' charging model, which would deliver the correct cost messages at the time of connection and investment decision making i.e. a true marginal cost. We recognise that such a model would prove very unpopular in some quarters and hence won't be accepted. However, the decision that others should pay for your investment decisions and that generation can be sited in positions and in timescales that are undesirable from a system perspective, will inevitably lead to some very difficult charging and operational consequences, not least of which is trying to find a compatible short term access product.

Yours sincerely

Nick Frydas
Transmission Manager, EDF Trading Ltd

Magnox Electric

Re: UoSCM-M-13 - Introducing a new charge for Short Term Transmission Access

Please find attached Magnox Electric plc's response to the above charging modification proposal. Magnox Electric's views on the issues raised within the consultation document are set out below;

- i. The proposal fails to meet the licence condition objective of resulting in charges which reflect, as far as reasonably practicable, the costs incurred by National Grid in its Transmission Business
- ii. The use of a charging method which pro-rates the charge across the peak period is inappropriate where costs are related to system peak
- iii. The proposal contains no cost reflective mechanism for pricing STTEC outside of peak periods

- iv. The proposal fails to meet the licence condition of facilitating effective competition in the generation and supply of electricity

Thankyou for the opportunity to comment on your proposals. If you require any further information or clarification on any of the issues raised then please do not hesitate in contacting me.

Yours Sincerely

Nigel Burrows
Regulation & Market Access Manager

RESPONSE TO UoSCM-M-13 INTRODUCING A NEW CHARGE FOR SHORT TERM TRANSMISSION ACCESS

The proposal fails to better fulfil NGC's licence obligation to develop charges which reflect, as far as reasonably practicable, the costs incurred by National Grid in its Transmission Business

The proposal has the potential to undermine the existing annual Transmission Export Capacity (TEC) arrangement. UoSCM-M-13 proposes to introduce charges for a Short Term Transmission Export Capacity (ST-TEC) product dependent upon the duration of generating at the peak. NGC has defined a winter period of 120 days to recover transmission costs through ST-TEC; it is unclear whether this will encourage operators to return mothballed plant to service or encourage marginal generators to withdraw plant for extended periods of the year.

If the allocation period is too long, ST-TEC will appear attractive relative to annual TEC, this will encourage peaking plant to convert from TEC to the ST-TEC product. In such a scenario, baseload plant paying annual TEC may be allocated a disproportionate share of transmission costs, effectively subsidising peaking plant over the winter period.

Under the proposed tariff for ST-TEC, we believe operators will attempt to reduce their costs by seeking to declare lower initial TEC values, and to supplement these with the ST-TEC product during periods of peak system demand.

Alternatively, if the allocation period is too short, such that ST-TEC became as expensive as TEC, there would be no incentive on generators to use ST-TEC.

The use of a charging method, which pro-rates the charge across the peak period, is inappropriate where costs are related to system peak

As the bulk of the transmission costs are fixed for an annual period, any allocation of costs between TEC and ST-TEC will be purely arbitrary (as there cannot be a purely cost reflective allocation). NGC has suggested in the proposal that 90% of the annual charge is linked to the system peak. We would presume, therefore, that these costs are driven primarily by the magnitude of system peak (in GW) rather than the duration at which plant is generating at the peak – which NGC arbitrarily determines as 120 days (including non-business days). The proposed charging method would alter the cost structures of generating plant such that peaking plant would pay a lesser proportion of TNUoS, which would result in baseload generators paying a higher share; this may be considered unduly discriminatory as it potentially allows a user to access the system at time of system peak at a fraction of the cost compared to a generator who pays annual TEC.

This is illustrated most clearly by the more extreme example given in Appendix 1. This is inconsistent with both increasing cost-reflectivity and encouraging economic use of the transmission system.

We also note the inconsistency with the Triad charging methodology used for demand. A site that consumes over the three Triad points will pay full annual TNUoS, even if it is not operating at other times over the winter period.

It is BNFL's opinion that NGC will recover a smaller proportion of its annual transmission costs through the introduction of ST-TEC. This shortfall will need be recovered from generators that pay annual TEC.

The proposal contains no cost reflective mechanism for pricing TNUoS.

With regard to cost-reflectivity of existing charges, if NGC believes that 90% of costs are linked to system peak, which can be allocated to a 120 day period, then presumably there should be peak and non-peak TNUoS tariffs, with 90% of revenue recovered during the peak 120 day period (based on declared TEC) and 10% of revenue recovered during the remaining off-peak period.

The basis for the 90%/10% split is far from clear. We understand that these figures came about through NGC's analysis of the breakdown of its historic expenditure, when considering a short-term access product in last year's charging review process. That process failed to find a resolution to this issue.

We note that the key change from the 2003/04 charging methodology to 2004/05 was the use of forward-looking cost information rather than historic. Therefore, we question how the 90%/10% split was derived and consider that the methodology is both non-transparent and inappropriate in the context of a forward-looking cost methodology.

There is a separate issue in that the remaining 10% (investment costs not deemed to relate to meeting system peak) are not paid by users of the ST-TEC product. During last year's charging review it was deemed not to be possible to attribute these costs to any particular time of year (including the off-peak period); therefore any ST-TEC charging should include an allocation of this element of TNUoS charges.

The proposal fails to meet the licence condition of facilitating effective competition in the generation and supply of electricity

BNFL believe it is inappropriate to unduly discriminate against generators that are available all year round, by arbitrarily redistributing transmission costs so as to lower the costs of entry to peaking plant. If winter prices are not sufficiently high enough to attract plant to return to the system, we believe, that either prices need to rise sufficiently or another mechanism that incentivises plant to remain or return to the system.

Additionally, the proposed charging could provide greater flexibility for generators who purchase ST-TEC – this could prove detrimental. At times of unexpected system stress, for example Summer 03, generators without annual TEC would not be incentivised to return plant to operation; operators of marginal plants may have taken the decision in advance to be unavailable over the summer months in order to reduce TNUoS costs. This could leave tightening supply margins and cause short-term price spikes, which would not be reflective of supply-demand forces.

The very existence of a short-term charge for transmission access has the potential to distort market prices – in effect this becomes a marginal cost for generators to consider when deciding whether, and for how long, they wish to operate during the year. We note that there is no cost-reflective basis on which these charges can be set (with the possible and clearly unworkable option of charging zero for ST-TEC, on the basis that by definition, the short-term access would not cause any additional network costs). As a consequence, any charge for ST-TEC will be a distortion to market prices, which will unnecessarily alter the times at which plant is made available and adds a new, and material, "regulatory" risk to operators in the market.

We also believe introducing ST-TEC could undermine effective competition through the possibility of:

- **price distortion**, since certain participants could apply for multiple blocks of transmission access and decide not to use the capacity (as stated in the alternative proposal (CAP070) , thus preventing others from accessing the market and hence, artificially, push up market prices; and
 - **market power**, certain market participants, due to market power, could buy all or a large proportion of available capacity, hence participants could book capacity months ahead, and take an unfair advantage of higher prices.

NGT argue that the administration fee (£10k) is a natural check, however, the potential gains from price manipulation / market power could outweigh the administration costs.

[MAGNOX ELECTRIC'S] APPENDIX 1 : IMPACT OF ST-TEC

As an illustration, imagine there is 40GW of generating plant that generates throughout the year and 10GW of peak plant that only generates during the peak period. Of that 10GW of peak plant, 5GW generates throughout the whole of the peak period and 5GW generates for only 60 days.

Say that average TNUoS is £2/KW.

Under the current arrangements, a total of 50GW of TEC will be applied for and NGC will receive revenues of £100m.

Under the ST-TEC proposal, if operators act rationally then only 40GW of TEC will be applied for. NGC will receive revenues of £80m for this tranche. 5GW of ST-TEC for the whole of the peak period will be applied for, for which NGC will receive $5\text{GW} \times 0.9 \times £2/\text{KW} = £9\text{m}$. A further 5GW of ST-TEC for 60 days only will be applied for, for which NGC will receive $5\text{GW} \times £2/\text{kW} \times 0.9 \times (60/120) = £4.5\text{m}$. The total revenues received by NGC is £93.5m.

The example illustrates a number of points pertinent to the assessment of the ST-TEC proposal:

1. There is an incentive on operators to use ST-TEC in preference to TEC wherever possible as they will incur reduced charges compared to those which they would currently face.
2. Under these circumstances, TEC becomes an unreliable guide as to the likely level of system usage.
3. Where ST-TEC is available, the total revenues recovered by NGC falls although system usage is identical. This suggests that the ST-TEC product is inappropriately priced or that further consequent changes to charging methodologies are required.
4. Given that the ST-TEC proposal incentivises operators to minimise their usage of TEC and maximise the usage of ST-TEC, there is a likelihood that security of supply will be reduced as some plant that is available at times of low margins may be prevented from generating.
5. A more extreme example highlights how the pricing of ST-TEC is inappropriate. If there is 40GW of generating plant as before that generates (or is expected by its operator to generate) throughout the year and 10GW of peak plant that only generates during the peak period. Say that the 10GW of peak plant applies for ST-TEC for only a 30 day period in which it proposes to generate. The total revenue collected by NGC would now be $40\text{GW} \times £2/\text{kW} = £80\text{m}$ [from those generators operating throughout the year] and $10\text{GW} \times £2/\text{KW} \times 0.9 \times (30/120) = £4.5\text{m}$ [from the generators running solely for 30 days at peak]. Thus under the NGC proposal only 6% of TNUoS revenue is incurred by 20% of plant operating at peak.

RWE Innogy

Modification Proposal to the Use of System Charging Methodology

UoSCM-M-13: Introducing a new charge for Short Term Transmission Access

RWE Innogy welcomes the opportunity to comment on the issues contained within the consultation for UoSCM-M-13. As UoSCM-M-13 has been proposed to introduce a new charge for the Short-Term Transmission Access product defined in CUSC Amendment Proposal CAP070, we refer herein to both sets of proposals.

In Summary

RWE Innogy does not support UoSCM-M-13 for the following reasons

- We do not support CAP070
- The logic behind the proposed methodology for calculating the STTEC charge is fundamentally flawed .
- It would undermine the locational investment signals provided by annual TNUoS charges.
- It would create perverse incentives to lower the available TEC on the system, thereby reducing rather than improving system margin.
- It would frustrate the objective of facilitating competition since the charges would be inconsistent between positive and negative charging zones

We do not believe a change to the charging methodology is necessary, as we do not support the associated CUSC Amendment CAP070 for the additional reasons below:

- We do not believe that the perceived defect (barrier to entry) actually exists.
- The amendment would not facilitate the return of mothballed plant.
- The proposed drafting allows applications to be assessed at the 'absolute discretion' of NGC, rather than according to clear and consistent criteria based on the relevant licence objectives.

The Short-Term Transmission Access product as defined by CAP070 must not be introduced unless the associated modification to the charging methodology delivers a consistent methodology for STTEC and annual TEC. UoSCM-M-13 does not deliver this requirement. Moreover, it could seriously undermine the ICRP methodology and the locational investment signals provided by TNUoS charges.

The logic behind the proposed calculation of the STTEC tariff in positive zones is seriously flawed. The proposed formula would multiply the annual TNUoS tariff in the relevant zone by 0.9 and further by a ratio representing the number of days in the STTEC period divided by the number of days in the months November-February inclusive. The supposed logic behind this is that 90% of the annual TNUoS charge is attributed to the peak capacity period (based on analysis carried out for UoSCM-M-11).

If TNUoS tariffs are multiplied by 0.9 to reflect the purported fact that 90% of the annual TNUoS charge may be attributed to the peak capacity period, a separate commodity charge must be applied to recover the remaining 10% (as proposed in UoSCM-M-11). As it is incurred throughout the year, the remaining 10% would be equally attributable to Users of STTEC as Users of TEC. As UoSCM-M-13 does not propose a separate commodity charge, it is not internally consistent.

Even if one accepts that 90% of the annual TNUoS charge may be attributed to the peak capacity period, the probability of the 'peak capacity period' occurring between November and February is not uniform. System peak is far more likely to occur in January than November. It is therefore wholly inappropriate simply to pro-rate the TNUoS charge in the manner proposed.

The proposed methodology for the calculation of tariffs is not consistent between negative and positive zones leading to discriminatory treatment between parties being charged for STTEC. This could cause great instability in charges with the potential for Users to move between negative and positive zones (particularly given the implementation of BETTA). Moreover, the application of a zero STTEC charge for all negative charging zones fails to both reflect the different transmission costs between different negative charging zones and to provide locational signals of where the transmission system would benefit from STTEC .

The consequences of the exclusion of STTEC from the generation input to the DCLF model has not been properly assessed. It would result in an incentive on northern generators to reduce TEC in order to manipulate the locational differentials calculated by the DCLF model and consequently reduce their TNUoS charges at the expense of the overall economic efficiency of the system. This would in turn enhance the economics of mothballing plant in the south of the country, thus reducing the available transmission capacity. CAP070 and UoSCM-M-13 could therefore achieve the opposite of their stated aim, by lowering the overall available TEC on the system.

Moreover, we would expect the STTEC capacity available at winter peak to be extremely limited. Significant quantities of surplus TEC at the time of the winter peak would suggest that the transmission system may be over engineered and that inefficient investment has been allowed. However, if the transmission system is not designed to meet TEC (as is persistently claimed), but is in reality designed to reflect a merit-order reflective probability distribution of use of TEC, one would expect this to produce surplus TEC related to changes in the assumptions underpinning the effective merit-order. The reality of the system planning process must be reflected by appropriate scaling of the generation data used as an input to the DCLF model. Without prejudice to our objection to this proposed change, we therefore disagree with NGC's proposal to exclude STTEC from the ICRP model.

Devising a sub-annual charging methodology for transmission access is highly problematic. UoSCM-M-11 was proposed following discussions on a Within-Year tariff during the 2003 Charging Review but was rejected by the authority. This modification did not fundamentally address the temporal nature of TNUoS tariffs as it proposed a Year-Round charge.

RWE Innogy believes that one solution that would enable the creation of a within-year tariff lies in the separation of the recovery of the residual part of the TNUoS tariff to the locational part of the tariff. The locational part of the tariff is designed to reflect the marginal investment cost of capacity locating at different parts of the system. If the investment cost is driven primarily by peak conditions, it would not be reduced by

a generator reducing its access requirements over the summer (or indeed, any winter month other than the peak). It is therefore essential for the current charging base, reflecting use of the system at winter peak, to be maintained in order to provide cost-reflective locational signals.

The residual part of the tariff, however, is designed simply to ensure the correct overall cost recovery. The charging base is arbitrary in this respect since it would be equally appropriate to charge for residual costs on a £/MWh or a £/kW/year basis. A separately levied residual TNUoS commodity charge would greatly facilitate the implementation of proposed schemes to exempt certain categories of user from the residual element of TNUoS tariff; namely the GB small generator subsidy proposed by the DTI and the prohibition of 'pancaking' charges on interconnector users by European Regulation on Cross-Border Trading. Yours sincerely

Shona Watt
Transmission Charging Manager
npower

Scottish Power

UoSCM-M-13 – Introducing a new charge for Short Term Transmission Access Consultation document June 2004

Thank you for the opportunity to respond to this consultation. This response is submitted on behalf of ScottishPower UK Division, which includes the UK energy businesses of ScottishPower, namely ScottishPower Energy Management Ltd, ScottishPower Generation Ltd and ScottishPower Energy Retail Ltd.

We believe it is important to consider alternative forms of transmission access products, however in considering the proposals set out in this consultation it is impossible to divorce the definition of the product itself from its associated charging arrangements. Therefore please consider this response on the charging arrangements for STTEC proposed in UoSCM-M-13 alongside our recent comments on the associated CUSC Amendment Proposal CAP070, to which we responded separately. As discussed below we do not support the proposals in UoSCM-M-13, therefore we are unable to support CAP070 if the associated charging arrangements are to be those currently set out in UoSCM-M-13.

While there may be merit in developing a short term transmission access product, we believe that the associated charging arrangements must be suited to the product, and satisfy the relevant charging objectives in that context. However, NGC's proposed charging arrangements for STTEC appear to be based entirely on the objective of retaining TEC as the primary product, rather than ensuring they are appropriate for STTEC. NGC recognise that the "marginal infrastructure costs in terms of the investment to provide STTEC are zero"¹, yet it proposes to base the charge for STTEC on the current locational TNUoS charge on TEC². This is clearly not cost-reflective. Further, STTEC by its very nature makes short term use of existing transmission capacity which is available for the period requested, with no certainty to either the user or to NGC that this same capacity will be either available or used as STTEC at any time in the future. By contrast NGC must offer terms for all TEC applications, and once granted, TEC is evergreen. Hence **TEC and STTEC are very different products**. It is disappointing therefore that NGC propose to charge for them on essentially the same basis. **We do not agree that NGC's current locational TNUoS methodology is a suitable basis on which to charge for TEC, much less that charges for different access products should necessarily be derived from the charge for TEC**. Indeed, by NGC's own statement above,

to use it as the basis for STTEC is clearly not cost-reflective, hence contrary to NGC's relevant charging objectives.

We believe that a more appropriate basis on which to charge for STTEC would be the average annual TNUoS charge on generation, prorated to the period for which STTEC is granted. This approach would recognise that STTEC only makes use of existing capacity and has a marginal infrastructure investment cost of zero. This same charge should apply to all locations, recognizing that STTEC will only be granted if the transmission capacity is available for the period required. As it would be a positive charge, this would incentivise users in negative charging zones to use TEC rather than STTEC, while in the north the increased risk of relying on STTEC would provide an incentive to use TEC instead. Further, as stated in our response to CAP070, we believe that STTEC revenue for a given year should be reallocated uniformly back over users with TEC for that same year, in the form of refunds given as part of the annual generation reconciliation process. We believe that this approach would be fairly simple to implement, ensure all STTEC revenue is reallocated to generation rather than demand, and provide a further incentive on generators in all locations to use TEC rather than STTEC in order to be eligible for the refund.

We agree that STTEC should not be included in the DCLF model, and that the cap on the generation charging base in negative zones should not be increased from TEC to TEC+STTEC.

I hope you find these comments helpful. Please contact me if you wish to discuss any of the issues raised in this response.

Yours sincerely,

Mike Harrison

Commercial Manager, Trading Arrangements
ScottishPower Energy Management Limited

¹ Indeed, the only additional costs associated with STTEC are those incurred in processing the application, and these are proposed to be recovered through a non-refundable application fee.

² **We also note that NGC's proposed STTEC charge would also apply to summer usage despite being derived from a peak-based TEC charge under the assumption that it is used in winter. We do not believe that this approach is appropriate. However, the STTEC charge calculated under our alternative methodology would be appropriate for usage at any time of year.**

APPENDIX 2 – PROPOSED REVISED WORDING OF CHAPTERS 3, 5 & 7 OF THE USE OF SYSTEM CHARGING METHODOLOGY

Chapter 3: Derivation of the Transmission Network Use of System Energy Consumption Tariff and Short Term Transmission Entry Capacity Tariff

TNUoS Energy Consumption Tariff

- 3.1 For the purposes of this section, Lead Parties of Balancing Mechanism (BM) Units that are liable for Transmission Network Use of System Demand Charges are termed Suppliers.
- 3.2 Following calculation of the Transmission Network Use of System £/kW Demand Tariff (as outlined in **Chapter 2: Derivation of the Transmission Network Use of System Tariff**) the p/kWh energy consumption tariff for each GSP Group is calculated as follows:

$$\text{p/kWh Tariff} = \frac{(\text{NHHDF} * \text{£/kW Tariff}) * 100}{\text{NHC}_G}$$

Where:

£/kW Tariff = The £/kW Demand Tariff (£/kW), as shown in Schedule 1 of **The Statement of Use of System Charges**, for the GSP Group concerned.

NHHD_F = National Grid's forecast of Suppliers' non-half-hourly metered Triad Demand (kW) for the GSP Group concerned. The forecast is based on historical data.

NHC_G = National Grid's forecast of GSP Group non-half-hourly metered total energy consumption (kWh) for the period 16:00 hrs to 19:00hrs inclusive (i.e. settlement periods 33 to 38) inclusive for the year 1 April to 31 March for the GSP Group concerned.

Short Term Transmission Entry Capacity Tariff

- 3.3 The Short Term Transmission Entry Capacity tariff for positive zones is derived from the relevant annual TNUoS £/kW tariff. The premium associated with the flexible product is associated with the analysis that 90% of the annual charge is linked to the system peak. The system peak is likely to occur in the period of November to February inclusive (120 days, irrespective of leap years). The calculation for positive generation zones is as follows

$$\frac{FT_{Gi} \times 0.9 \times \text{STTEC Period}}{120} = \text{STTEC tariff } (\text{£/kW/period})$$

Where

<u>FT</u>	=	<u>Final annual TNUoS Tariff expressed in £/kW</u>
<u>Gi</u>	=	<u>Generation zone</u>
<u>STTEC Period</u>	=	<u>A period applied for in days as defined in the CUSC</u>

- 3.4 For the avoidance of doubt, the charge calculated under 3.3 above will represent each single period application for Short Term Transmission Entry Capacity. Requests for multiple STTEC periods will result in each STTEC period being calculated and invoiced separately.
- 3.5 The STTEC tariff for negative zones is set to zero to prevent users receiving greater than 100% of the annual TNUoS payment that would have been received for that capacity under a firm TEC.
- 3.3.6 The tariffs applicable for any particular year are detailed in National Grid's **Statement of Use of System Charges** which is available from the **Charging website**. Historical tariffs are also available on the **Charging website**.

Chapter 5: Generation charges

Parties Liable for Generation Charges

- 5.1 The following parties shall be liable for generation charges:
- i) The Lead Parties of BM Units comprising Licensable Generation which form the whole or part of a Power Station or Trading Unit that is capable of exporting 100MW or more to the Total System, as agreed with National Grid.
 - ii) The Lead Parties of BM Units comprising generation that have a Bilateral Connection Agreement with National Grid.
 - iii) Interconnector Asset Owners of Interconnectors capable of exporting 100MW or more to the Total System.
- 5.2 **Appendix TN-5: Classification of parties for charging purposes** provides an illustration of how a party is classified in the context of Use of System charging and refers to the relevant paragraphs most pertinent to each party.

Basis of Generation Charges

- 5.3 The value of generation to be multiplied by the relevant generation tariff, for the calculation of generation charges, is set out below. For the avoidance of doubt, the intention of the charging rules is to charge the same physical entity only once.
- 5.4 The basis of the generation charge for Power Stations and Interconnectors is the Chargeable Capacity [and the short term chargeable capacity](#) (as defined below for positive and negative charging zones).

Positive Charging Zones

- 5.5 The Chargeable Capacity for Power Stations situated in positive charging zones is the highest Transmission Entry Capacity (TEC) applicable to that Power Station for that Financial Year. A Power Station should not exceed its TEC as to do so would be in breach of the CUSC, except where it is entitled to do so under the specific circumstances laid out in the CUSC [\(e.g. where a User has been granted Short Term Transmission Entry Capacity, STTEC\)](#).
- 5.6 [The short term chargeable capacity for Power Stations situated in positive charging zones is any approved STTEC applicable to that Power Station during a valid STTEC Period.](#)
- 5.7 The Chargeable Capacity for an Interconnector connected to a positive charging zone is the highest TEC applicable to that Interconnector for that Financial Year. An Interconnector should not exceed its TEC as to do so would be in breach of the CUSC, except where it is entitled to do so under the specific circumstances laid out in the CUSC. [\(e.g. where a User has been granted Short Term Transmission Entry Capacity, STTEC\)](#).
- 5.8 [The short term chargeable capacity for an Interconnector connected to a positive charging zone is any approved STTEC applicable to that Interconnector during a valid STTEC Period.](#)

Negative Charging Zones

- 5.9 The Chargeable Capacity for Power Stations and Interconnectors situated in negative charging zones is the average of the capped metered volumes during the three settlement periods described in [5.10](#) below, for the Power Station (i.e. the sum of the metered volume of each BM Unit associated with Power Station) or Interconnector. A Power Station or Interconnector should not exceed its TEC as to do so would be in breach of the CUSC, except where it is entitled to do so under the specific circumstances laid out in the CUSC ([e.g. where a User has been granted Short Term Transmission Entry Capacity, STTEC](#)). If TEC is exceeded, the metered volumes would each be capped by the TEC for the Power Station or Interconnector applicable for that Financial Year.

[5.85.10](#) The three settlement periods are those of the highest metered volumes for the Power Station or Interconnector and the two half hour settlement periods of the next highest metered volumes which are separated from the highest metered volumes and each other by at least 10 Clear Days, between November and February of the relevant Financial Year inclusive. These settlement periods do not have to coincide with the Triad.

Example

If the highest TEC for a Power Station were **250 MW** and the highest metered volumes and resulting capped metered volumes were as follows:

Date	19/11/02	13/12/02	6/2/03
Highest Metered Volume in month (MW)	245.5	250.3	251.4
Capped Metered Volume (MW)	245.5	250.0	250.0

then the chargeable Capacity for the Power Station would be:

$$\left(\frac{245.5 + 250 + 250}{3} \right) = \mathbf{248.5 \text{ MW}}$$

Note that in the example above, the Generator has exceeded its TEC on 13 December 2002 and 6 February 2003 and would therefore be in breach of the CUSC.

- 5.11 [The short term chargeable capacity for Power Stations situated in negative charging zones is any approved STTEC applicable to that Power Station during a valid STTEC Period.](#)

Monthly Charges

[5.95.12](#) Initial Transmission Network Use of System Generation Charges for each Financial Year will be based on the Power Station Transmission Entry Capacity (TEC) for each User as set out in their Bilateral Agreement. The charge is calculated taking the forecast Chargeable Capacity and multiplying it by the zonal £/kW tariff. This annual TNUoS generation charge is split evenly over the 12 months and charged on a monthly basis over the year. For positive charging zones, if TEC increases during the charging year, the additional annual charge incurred will be recovered uniformly across the remaining chargeable months in the relevant charging year. For negative charging zones, any change in TEC during the year will lead to a recalculation of the monthly charges for the remaining chargeable months of the relevant charging year. As a result, if TEC increases, monthly payments to the generator will increase accordingly, and if TEC decreases, monthly payments will fall accordingly.

Ad hoc Charges

[5.13](#) For each STTEC period successfully applied for, a charge will be calculated by multiplying the Short Term Transmission Entry Capacity by the tariff calculated in accordance with Paragraph 3.3. NGC will invoice Users for the STTEC charge once the application for STTEC is approved.

Reconciliation of Generation Charges

[5.405.14](#) The reconciliation process is set out in the CUSC.

Further Information

[5.445.15](#) **The Statement of Use of System Charges** contains the £/kW generation zonal tariffs for the current Financial Year.

Chapter 7: Applications

7.1 Application fees are payable in respect of applications for new use of system agreements, ~~and~~ modifications to existing agreements and applications for STTEC based on the reasonable costs National Grid incurs in processing these applications. Users can opt to pay a fixed price application fee (derived from analysis of the historical costs of similar applications) in respect of their application or pay the actual costs incurred. The fixed price fees for applications are detailed in the **Statement of Use of System Charges**.

7.2 For the avoidance of doubt, the STTEC Request Fee is fixed and is non-refundable in accordance with the CUSC.

~~7.27.3~~ If a User chooses not to pay the fixed fee, the application fee will be based on an advance of National Grid Engineering and out-of pocket expenses and will vary according to the size of the scheme and the amount of work involved. Where actual expenses exceed the advance, National Grid will issue an invoice for the excess. Conversely, where National Grid does not use the whole of the advance, the balance will be refunded.

7.37.4 With the exception of the STTEC Request Fee, National Grid will refund application fees and consent payments made under the Construction Agreement either on commissioning or against the charges payable in the first three years of the new or modified agreement. The following conditions apply:

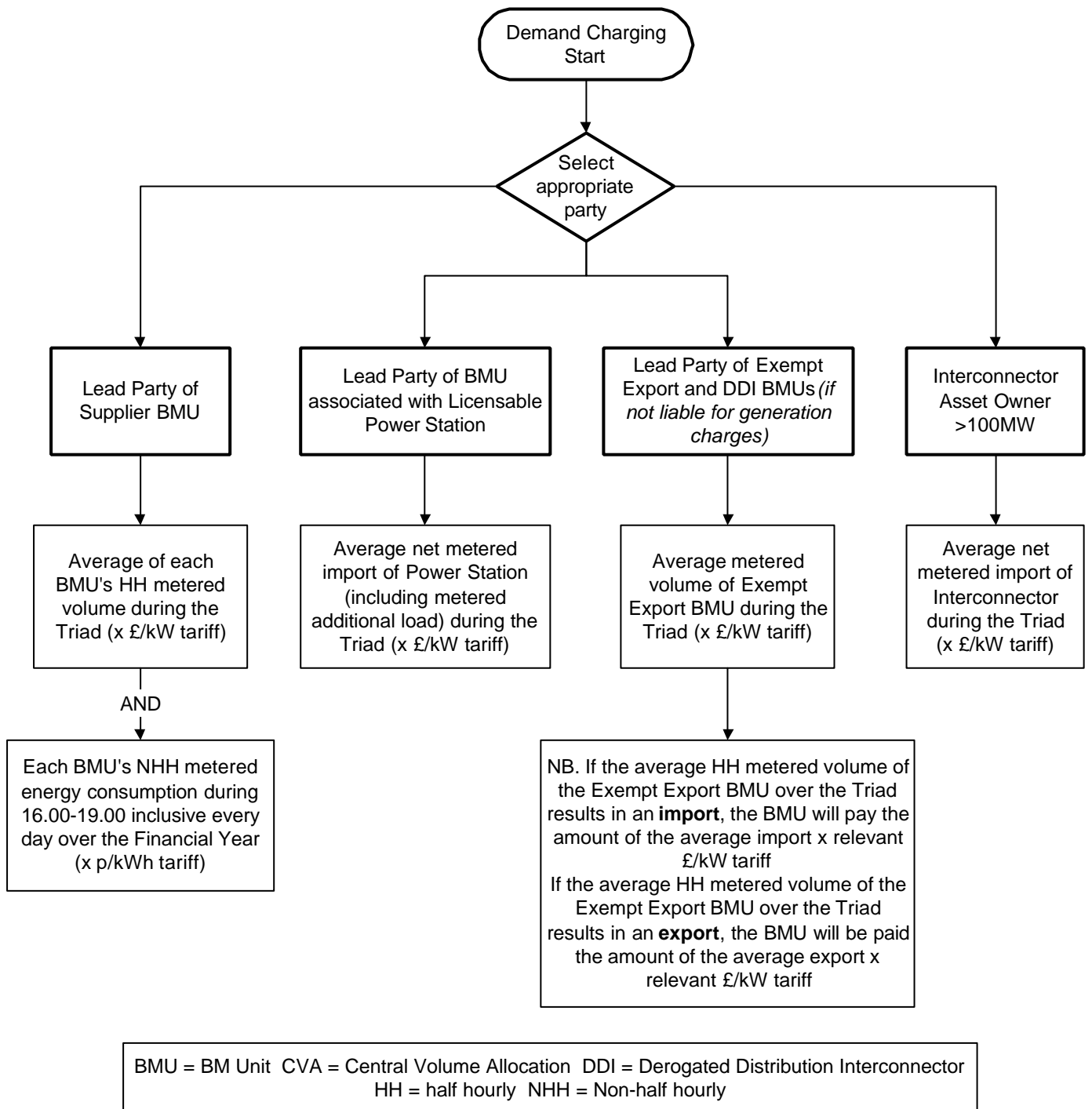
- The refund will be net of external costs;
- Where a new or modified agreement is signed and subsequently modified at the User's request before any charges become payable, National Grid will refund the original application fee. National Grid will not refund the fees in respect of the subsequent modification(s).

Appendix TN-6: Transmission Network Use of System Charging Flowcharts

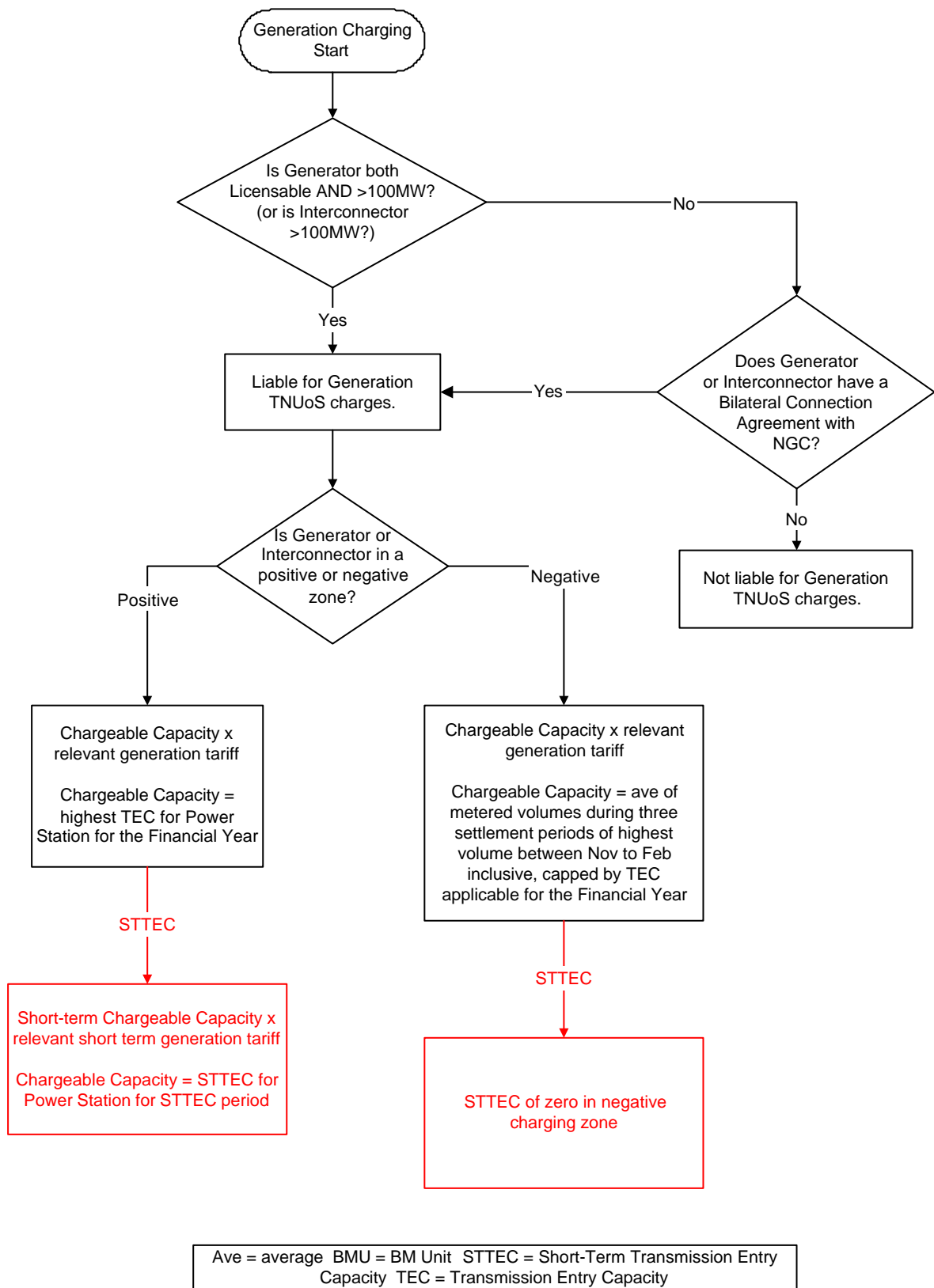
The following flowcharts illustrate the parties liable for Demand and Generation TNUoS charges and the calculation of those charges.

In the event of any conflict between this Appendix and the main text within this Statement, the main text within the Statement shall take precedence.

Demand Charges



Generation Charges



Glossary

Short Term Transmission Entry Capacity (STTEC)

As defined in the Connection and Use of System Code

STTEC Period

As defined in the Connection and Use of System Code

STTEC Charge

The product of the STTEC and the STTEC tariff calculated in accordance with Paragraph 3.3 and 3.5 of The Statement of Use of System Charging Methodology

APPENDIX 3 – PROPOSED REVISED TABLES FOR THE STATEMENT OF USE OF SYSTEM CHARGES

Schedule 1

Schedule of Transmission Network Use of System Generation Charges (£/kW) in 2004/2005

Generation Zone	Zone Area	Generation Tariff (£/kW)	Short Term Generation Tariff (£/kW)		
			STTEC Period = 28 days	STTEC Period = 35 days	STTEC Period = 42 days
1	Northern	9.009237	1.891940	2.364925	2.837910
2	Humberside	5.767201	1.211112	1.513890	1.816668
3	North West	6.222266	1.306676	1.633345	1.960014
4	Pennines & North Wales	4.121912	0.865602	1.082002	1.298402
5	Dinorwig	10.715347	2.250223	2.812779	3.375334
6	Anglesey	7.011370	1.472388	1.840485	2.208582
7	East Anglia	2.889748	0.606847	0.758559	0.910271
8	West Midlands	2.032089	0.426739	0.533423	0.640108
9	South Wales & Gloucs	-2.150590	0.000000	0.000000	0.000000
10	Oxon & Bucks	0.004330	0.000909	0.001137	0.001364
11	Estuary	1.733641	0.364065	0.455081	0.546097
12	Central & SW London	-6.604821	0.000000	0.000000	0.000000
13	South Coast	-1.507146	0.000000	0.000000	0.000000
14	Wessex	-3.829097	0.000000	0.000000	0.000000
15	Peninsula	-6.836065	0.000000	0.000000	0.000000

Schedule 2

Application Fees for Connection and Use of System Agreements

Application fees are payable in respect of applications for new connection agreements, certain use of system agreements and for modifications to existing agreements. The application process and options available are set out in the Statement of the Use of System Charging Methodology and the Statement of the Connection Charging Methodology.

Users can opt to pay a fixed price application fee in respect of New and Modified Bilateral Agreements as shown in Tables A and B below. The fee is dependent upon size, type and location of the applicant's scheme. Alternatively, Users can opt for a variable price application and pay an advance of National Grid Engineering Charges, based on the fixed prices shown in Tables A and B, which will be reconciled once the actual costs have been calculated using the charge out rates contained in Schedule 3.

For the purposes of Tables A and B below North is defined as the Transmission Network Use of System generation tariff zones 1 to 6 inclusive. South is defined as the TNUoS generation tariff zones 7 to 15 inclusive. It should be noted that the zone to which a particular user is applying is determined by the location of the connection to the National Grid's transmission system and not by the geographical location of the user's plant and equipment.

Please note that the fees quoted for items 1 and 7 below refer to the final MW figure applied for, not the difference between the original and the final figures.

Table A: Fixed Prices for New Bilateral Agreements

		MW	Fee (£'000)	Agreement Type (as Table C)
1	Directly connected generation: North	<300	35 + VAT	Bilateral Connection Agreement
		=>300 <1320	70 + VAT	
=>1320		100 + VAT		
1	Directly connected generation: South	<300	25 + VAT	Bilateral Connection Agreement
		=>300 <1320	50 + VAT	
		=>1320	70 + VAT	
2	Directly connected reactive only service provider	-	20 + VAT per site 10 + VAT for each additional/alternative site	Bilateral Connection Agreement
3	Embedded generation	=>100 =>50 <100	10 + VAT no application fee	Bilateral Embedded Generation Agmt
4	Embedded generation*	<50	no application fee	refer to National Grid
5	New supply point	-	40 + VAT	Bilateral Connection Agreement
6	Suppliers	-	no application fee	Contained in CUSC

*Applies to the BSC Party registering the generation

Table B: Fixed prices for Modifications to existing Bilateral Agreements

		MW	FEE (£'000)	Agreement Type (as Table C)
7	Addition/reduction of directly connected generating capacity: North	<300 =>300 <1320 =>1320	35 + VAT 70 + VAT 100 + VAT	Bilateral Connection Agreement
	Addition/reduction of directly connected generating capacity: South	<300 =>300 <1320 =>1320	25 + VAT 50 + VAT 70 + VAT	Bilateral Connection Agreement
8	Removal after 2 years of option for direct connection of reactive only service provider	-	2.5 + VAT per site	Bilateral Connection Agreement
9	Addition/reduction of embedded generation	=>100 =>50 <100	10 + VAT no application fee	Bilateral Embedded Generation Agreement
10	Addition/reduction of embedded generation**	<50	no application fee	refer to National Grid
11	Addition/reduction of transformer at existing supply point	-	35 + VAT	Bilateral Connection Agreement
12	Modifications to existing supply points and agreements	-	20 + VAT	Bilateral Connection Agreement
13	Modifications to alter connection/ commissioning dates	-	30 + VAT	Bilateral Connection Agreement
14	Increase in Transmission Entry Capacity (TEC)	-	10 + VAT	Bilateral Connection Agreement/Bilateral Embedded Generation Agreement
15	Request for Short Term Transmission Entry Capacity (STTEC)	:	10 + VAT	Bilateral Connection Agreement/Bilateral Embedded Generation Agreement

**Applies to the BSC Party registering the generation.

Note: A Construction Agreement may be necessary in addition to the Bilateral Connection Agreement where construction works are required.