nationalgrid

AMENDMENT REPORT VOLUME 1

CUSC Amendment Proposal CAP162

Transmission Access – Entry Overrun

The purpose of this report is to assist the Authority in their decision of whether to implement Amendment Proposal CAP162

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1.0 SUMMARY AND RECOMMENDATIONS

Executive Summary

- 1.1 CAP162 "Transmission Access Entry Overrun" seeks to introduce a commercial mechanism for dealing with the situation where a power station exports above the sum of its transmission entry access capacity holding.
- 1.2 The CAP162 proposal would permit generators to export in excess of their total transmission entry access capacity holding. Their level of export (onto the transmission system) would only be capped by "local" rather than "wider" transmission system capability limits. The additional volume of transmission access used above the sum of its transmission access capacity holding would be known as 'Entry Overrun'.
- 1.3 The charging arrangements (codified in the charging methodologies) for Entry Overrun would establish a cost reflective charge for Entry Overrun, and would be consistent with facilitating competition.
- 1.4 The CAP162 proposal includes a revised process for 'local only' applications (which would allow connection without long-term entry rights for the wider transmission system). The CAP162 Original Amendment also proposes a change in the nature of transmission entry rights from nodal to zonal. The zones used would be consistent across all long-term and short-term transmission access products.
- 1.5 There is one Working Group Alternative Amendment proposal that proposes to retain a nodal definition to the transmission entry rights, which reflects difficulties encountered in establishing suitable zones. For the avoidance of doubt, National Grid expects that the charges will be based on the nodal (power station) metered output and not the sum of company zonal metered output as intended in the Original.
- 1.6 National Grid, as the proposer of CAP162, suggests that in order to ensure equitable treatment of non locational transmission asset costs that the residual charge should be treated in a different manner than under existing arrangements. The proposer also suggested that all Users should contribute to the residual charge.
- 1.7 The CUSC Amendment Panel established two Working Groups to assess different aspects of the modification. Working Group 1 assessed the principle of overrun. Working Group 3 supported Working Group 1 by assessing the definition of zones and local only connection process. Both of the Working Groups were also tasked by the Transmission Charging Methodologies Forum to investigate the charging aspects of the proposals.
- 1.8 National Grid has consulted in accordance with the CUSC and the responses are included as Volume 2 to this report.

Working Group Recommendation

1.9 The Working Group believes its Terms of Reference have been completed and CAP162 has been fully considered. The Working Group unanimously agreed that the WGAA was better than the baseline and also better than the Original proposal. At the final meeting on 18 November 2008 fifteen Working Group members cast votes:

Voting Results	For	Against	Abstain
Original better than Baseline	2	10	3
WGAA better than Baseline	15	0	0

1.10 The Working Group also voted on which of the Original or the WGAA better meets the CUSC applicable objectives:

Voting Results	For
Original best	0
WGAA1 best	15

Amendment Panels Recommendation

1.11 The Panel agreed that the Working Group had fulfilled its Terms of Reference. A number of Panel members stated that the report was as complete as possible given the time constraints associated with the wider Transmission Access Review. At the Panel meeting on the **19 December 2008** the Panel vote as follows:

Voting Results	For	Against	Abstain
Original better than Baseline	0	8	0
WGAA better than Baseline	8	0	0

1.12 The Amendment Panel also voted on which of the Original or the WGAA better meets the CUSC applicable objectives:

Voting Results	For
Original best	0
WGAA best	8

1.13 A number of Panel Members expressed concerns about the process that had been followed for the suite of modifications related to the transmission access review. The Panel agreed that a discussion covering these concerns along with lessons learned and consideration of how the conclusions are best communicated to the wider industry will take place at the Panel meeting in February. This will align with the completion of CAP166 and consideration of the interaction between modifications and the associated changes to the Charging Methodologies. The conclusions of this discussion will be forwarded to Ofgem such that they can feed into their assessment of the modifications, and potentially their wider work on Codes Governance.

National Grid Recommendation

- 1.14 National Grid does not support implementation of the CAP162 Original proposal due to the issues associated with zonal definition of access rights identified during the Working Group assessment.
- 1.15 The analysis work performed by National Grid demonstrates that the risk of increased socialised constraint costs is unacceptable and would not better facilitate the efficient discharge by the Licensee of the obligations imposed upon it by the Act and the Transmission Licence, particularly the requirement to be economic and efficient. In addition, the Original proposal would not better facilitate competition since it would expose Users to significant socialised costs which they would not be in a position to control.

- 1.16 National Grid does support the implementation of the Working Group Alternative Amendment that retains the nodal definition of access. This proposal introduces arrangements that, whilst not as flexible for Users as those initially proposed, do provide practical means to exceed booked transmission access rights without the associated increase in socialised constraint costs.
- 1.17 The Working Group Alternative Amendment better facilitates the efficient discharge by the Licensee of the obligations imposed upon it by the Act and the Transmission Licence by allowing Users at power stations with different operating regimes to exceed booked capacity when, in their view, it is economic to do so. These Users will only apply for additional long term access rights if overrun is not economic, and this would improve the signals provided to National Grid to invest in the transmission system leading to the development of a more economic and efficient transmission system. The Working Group Alternative Amendment better facilitates competition by providing alternative transmission access options for all Users, and by potentially freeing long-term access rights for use by others if existing Users choose to overrun, for all or a portion of their capability, and therefore optimise their long-term access rights holdings.

2.0 PURPOSE AND INTRODUCTION

- 2.1 This Amendment Report has been prepared by National Grid under the rules and procedures specified in the CUSC as designated by the Secretary of State.
- 2.2 Further to the submission of Amendment Proposal CAP162 and the subsequent wider industry consultation that was undertaken by National Grid, this document is addressed and furnished to the Gas and Electricity Markets Authority ("the Authority") in order to assist them in their decision whether to implement Amendment Proposal CAP162.
- 2.3 CAP162 was proposed by National Grid and submitted to the Amendments Panel for their consideration on 25th April 2008. CAP162 Working Group Report was submitted to the CUSC Amendments Panel meeting on 21 November 2008. Following evaluation and consultation by the Working Groups, the Amendments Panel determined that CAP162 was appropriate to proceed to wider industry consultation by National Grid.
- 2.4 This document outlines the nature of the CUSC changes that are proposed. It incorporates National Grid's recommendations to the Authority concerning the Amendment. Copies of all representations received in response to the consultation have been included in Volume 2 of this report.
- 2.5 This Amendment Report has been prepared in accordance with the terms of the CUSC. An electronic copy can be found on the National Grid Website, <u>www.nationalgrid.com/uk/Electricity/Codes/</u>.

3.0 PROPOSED AMENDMENT

- 3.1 CAP162 seeks to create a commercial mechanism for dealing with the exporting of power, by a power station, above that power station's existing transmission access capacity holdings. The full text of the CAP162 amendment is set out in Annex 4 of this report.
- 3.2 CAP162 would permit Users to export in excess of their total transmission access capacity holding¹, capped by "local" rather than "wider" system capability limits (e.g. CEC and any local transmission limits as detailed in the Users' bilateral agreement), and subject to continued Grid Code compliance. The additional volume of entry access used above total entry access capacity holding would be known as 'Entry Overrun'.
- 3.3 For the purposes of the Original CAP162 amendment, it is suggested that the charging arrangements for Entry Overrun would establish charges related to the cost imposed through accommodating Entry Overrun i.e. a cost reflective charge, treating Entry Overrun ("Overrun") as a service. The charges were expected to be determined on an aggregated company zonal basis.
- 3.4 The proposal highlighted credit implications with Overrun. Depending on the pricing methodology and the volume of Overrun, a User could expose itself to large costs in a very short space of time. The credit implications have been considered by the Working Group, and the detailed requirements included in the final drafting.
- 3.5 CAP162 includes a revised process for 'local only' applications (connection without long-term entry rights for the wider transmission system) and a change in the nature of long-term and short-term entry rights from nodal to zonal. The zones used would be consistent across all long-term and short-term transmission access products. National Grid, as the proposer of CAP162, suggests that in order to ensure equitable treatment of non locational asset costs that the residual charge should be treated in a different manner than under existing arrangements. The proposer also suggested that all Users should contribute to the residual charge.
- 3.6 The Working Groups have developed a Working Group Alternative Amendment, WGAA, which defines the transmission entry access capacity on a Power Station rather than zonal basis. Along with this, National Grid indicted that the charges for WGAA would be determined on the metered output of a Power Station rather than on an aggregated company zonal basis as envisaged for the CAP162 Original.
- 3.1 The Amendments Panel determined that the proposal should be considered by Working Groups 1 and 3 and that the Working Groups should report back to the Amendments Panel meeting within 3 months. In all respects, Working Group 1 acted as the CAP162 Working Group ('the Working Group'). Working Group 3 is constituted as sub-group to Working Group 1, voting and consultation on CAP162 was undertaken by Working Group 1². The Amendments Panel and Ofgem subsequently agreed a further 2 month

¹ Total transmission capacity holding is currently determined as the sum of a generators' holding of TEC, LDTEC & STTEC, as defined in the CUSC). A generators' export (onto the transmission system

² Transmission Access Working Groups 1 and 3 are interchangeable with Working Group 1 and 3 respectively in this report.

extension to these timescales in light of the approval of CAP160, which includes the requirement for the Working Group to consult on proposals.

3.7 Working Group 1 has met 15 times and Working Group 3 met 12 times. The Working Groups agreed the relevant Terms of Reference set by the Panel. The attendance record is provided in Annex 3. A copy of the Terms of Reference is provided in Annex 2. The Working Groups considered the issues raised by the Amendment Proposal and considered whether the Original and the Working Group Alternative Amendments better facilitated the Applicable CUSC Objectives.

4.0 SUMMARY OF WORKING GROUP 1 DISCUSSIONS

- 4.1 The Working Group recognised that whilst the CUSC could the principle of Overrun, the commercial decision to use Overrun would be mainly driven by the Overrun tariff derived from the charging methodology. This report presents a broad outline of the proposed charging arrangements that have been discussed to aid the reader although do not form part of the CUSC. The general options and outline principles for charging are discussed below. Readers should be aware that Charging methodologies governance is separate to that of the CUSC and that the proposals discussed below are still under development. Further discussion and consultation may lead to changes to or result in additional proposals that better meet the relevant charging objectives. All charging methodology changes are consulted upon by National Grid before being presented to the Authority.
- 4.2 Permitting parties to exceed their entry transmission access capacity holding would also have a number of impacts on other processes within the CUSC and framework documents. These are also considered in this report.

Charging background

- 4.3 In the Original CAP162 amendment proposal, National Grid indicated its intention to consider a number of possible methodologies that vary the balance of cost reflectivity, simplicity, transparency, implementation cost and timescales. As a result, the Working Group considered 3 possible alternatives for Overrun pricing:
 - i) Simple methodology;
 - ii) Cost Recovery methodology; and
 - iii) Marginal methodology.
- 4.4 The Original amendment proposed that settlement and charging processes would be based on zones, and by company (registered CUSC party). Any output above their contracted transmission access level would be charged at the cost of facilitating that Entry Overrun by National Grid. Timescales for settlement will be broadly similar to BSUoS timescales (1/2 hour settlement periods with a 28 day rolling settlement).
- 4.5 These methodologies are described briefly below, but are the subject of a separate charging governance arrangements.

Simple Methodology

4.6 The Working Group considered 3 potential methodologies for charging Overrun under the Simple Methodology. These were:

- i) X * TNUoS³ (where X is a multiple or "Scalar")
- ii) X*BSUoS⁴ [-RCRC⁵] (where X is a multiple or "Scalar")
- iii) Imbalance/Market-price based.
- 4.7 TNUoS is an asset based charge and so bears little relationship to the real time transmission system costs, which are influenced by real time availability of the transmission system as well as the availability, location and price of generation and the level of demand. The Working Group agreed that TNUoS was not a good proxy for short-run transmission access costs and so the X*TNUoS option was not favoured by the Working Group.
- 4.8 The Working Group also discussed but rejected the Imbalance/Market-price based methodology as energy effects would be included in the Overrun price and it would not reflect differing costs of Overrun in different locations. The Working Group agreed that a Simple Methodology based on a multiple of BSUoS or BSUoS minus RCRC would potentially offer the most appropriate solution as this would reflect short-term constraint costs recovered through BSUoS.
- 4.9 National Grid carried out detailed analysis on the correlation between transmission system constraint costs and (i) BSUoS and (ii) BSUoS minus RCRC for 3 years: 2005/6, 2006/7 and 2007/8. This analysis mapped over 250 constraint boundaries and their associated half hourly costs to 24 zones.
- 4.10 This basic process and most of the data used in the Simple methodology is the same as would be required for a "degut"⁶ of constraint costs for the Cost Recovery methodology (see below). However, the volume of overrun is unknown ex ante. Therefore the cost attributed to the constraint is divided by the volume of the constraint. This provides the average historical cost of Overrun when the constraint is active.
- 4.11 The results of the initial correlation analysis showed that the best correlation was achieved for 'BSUoS minus RCRC' versus 'constraints' on a half-hourly basis, providing a greater than 40% correlation. When zero constraint periods were removed the correlation (R²) increased to ~50%. After removing periods 22:30 to 07:00 (which account for ~10% of system constraints) the correlation drops to ~35%. Results for BSUoS alone and for daily, weekly and monthly values showed much lower correlations.
- 4.12 The Working Group felt that this analysis provided a reasonable basis for calculating Scalars which defined a relationship between BSUoS–RCRC and constraint costs. The Scalars would be published ex ante on National Grid's website. The complete data set available to National Grid for constraints starts from April 2005 (BETTA go-live), this lead to the initial analysis for calculating the Scalars being carried out on 3 years of historical data.
- 4.13 The Working Group discussed whether the Scalar could be switched off if no constraints were active i.e. no Overrun charging when there is no active

³ TNUoS – Transmission Network Use of System – asset based charge related to long-term access on wider transmission system

 ⁴ BSUoS – Balancing Services Use of System – charge based on cost incurred by SO in operating the transmission system
 ⁵ RCRC – Residual Cashflow Reallocation Cashflow – reallocation of cash flows collected

⁵ RCRC – Residual Cashflow Reallocation Cashflow – reallocation of cash flows collected from dual imbalance pricing in the Balancing and Settlement Code

⁶ "degut" -the ex-post process for apportioning operational costs to real time events or conditions

constraint on the transmission system. This approach is consistent with calculating the Scalar when the constraint is active. One option discussed for switching Scalars on/off was to use historic information showing which periods were constrained and non-constrained. This option is relatively simple to implement but is not necessarily an accurate guide of when future constraints will or will not occur.

- 4.14 An additional options approach would be to set some manual switch which would be notified after the event by National Grid. This would give a more accurate indication of when constraints were active but this option would add a degree of complexity and being notified ex post would reduce the benefits of the Simple Methodology. An further option discussed by the Working Group would be that there would be no switching all settlement periods would be classed as "active" and Overrun would be charged accordingly (albeit that the Overrun costs would be expected to be lower in less constrained periods as BSUoS minus RCRC should be relatively low). However there was concern that a constant 'active' status would lead to grossly over-recovering of transmission charges.
- 4.15 After further discussion and investigation National Grid agreed it could produce a zonal on/off switch based on predefined zones and settlement period, including an import and export flag, 2 business days after the day in question.
- 4.16 National Grid presented the initial indicative results of the analysis showing time- and volume-weighted Import and Export Scalars for each of the 24 zones considered. These are presented in the charging consultation.
- 4.17 The Working Group felt that the Simple Methodology did have some considerable advantages over the other methodologies in that it was a simpler approach yet gave a reasonable proxy for the costs of Overrun. The most significant advantage of a Simple Methodology is that through the ex ante publication of scalars and a market participant's forecast of BSUoS costs it provides an opportunity for estimating before the event the possible costs of overrunning, albeit that this would be an upper end estimation because the on/off switch is notified ex post. Therefore the simple methodology provides an opportunity to decide, based on the estimated cost, whether to overrun or not.
- 4.18 Following discussion of the issues raised in the CAP162 and CAP164 Working Group consultations National Grid indicated that it also expected to bring forward for consideration a wholly ex ante version of simple overrun. This would be developed with the Transmission Changing Methodologies Forum (TCMF). Whilst such an option may be less cost reflective it would provide grater certainty for developers and enable a greater volume of projects to utilise overrun.

Cost Recovery Methodology

- 4.19 The Original CAP162 amendment proposal contained a strawman based on the Cost Recovery Methodology to address short-term transmission access charging. This is included in Annex 4.
- 4.20 The Working Group considered the principles of Overrun charging under the Cost Recovery Methodology and agreed the following:
 - Overrun is charged on a per-BMU basis per-half hour settlement period

- Metered values rather than FPN values are to be used in calculating Overrun charge. The metered values will be adjusted for any bids taken.
- Parties pay an Overrun charge even when they have accepted offers.
- Parties are not liable to Overrun charges if responding to an Emergency Instruction (as defined in the Grid Code).
- Balancing actions taken outside the zone due to an overrunning party should be included in Overrun charges as National Grid is covering balancing actions (within and outwith the zone) due to the constraint arising from the Overrun.
- Overrun charges would include all costs incurred by National Grid, as the GBSO, due to the overrunning parties whether taken in the Balancing Mechanism ("BM") or outside of the BM (i.e. intertrip costs or warming contracts etc).
- The most expensive bids are to be tagged against the overrunning party.
- 4.21 Cost Recovery differs to the Simple methodology in that in the Cost Recovery methodology the 'degut' cost of the constraint is divided by the actually volume of overrun in the period the cost was incurred.
- 4.22 The Working Group discussed at some length the possible inclusion of negative Overrun charges in the Cost Recovery Methodology. Some Working Group members felt there should be symmetry between overrunning in an export group (thereby incurring a positive charge) and overrunning in an import group (thereby incurring a negative charge). In principle a payment could be made for Overrun where it was deemed to have benefited the transmission system, but this is difficult to do and was not initially envisaged.
- 4.23 The Overrun charging sub group believed, in terms of establishing a benefit, the analysis would be much more complicated than establishing the cost as the avoided cost is not currently recorded. National Grid indicated it was possible to replicate the control processes and recalculate actions ex post assuming overrun had not taken place, although this would be a very resource intensive and an extremely subjective process.
- 4.24 The Working Group agreed that accurate negative pricing was practically unachievable in the Cost Recovery methodology when considered in conjunction with criteria i.e. transparency, objectivity and auditability.
- 4.25 National Grid indicated that it viewed negative pricing as a characteristic of a particular charging methodology not a principle of Overrun charging per se. The Working Group agreed therefore that **no** credit should be given for Overrun that reduces cost (i.e. where cost is negative the Overrun charge is to be set at zero) under the Cost Recovery methodology. This is discussed in more detail in the consequential charging consultation where National Grid is requesting Industry views. To an extent, although not completely, parties would be able to guard against overrun charges considerably higher than they wished to incur by setting an appropriate bid price in the Balancing Mechanism.
- 4.26 The Working Group considered the pros and cons of the Cost Recovery methodology. On the plus side, it would be cost reflective and target the additional costs arising from Overrun back to the parties causing them (which was the intention of the Original CAP162 amendment proposal). However, the Working Group felt that targeting these costs would be difficult to achieve

and would inevitably entail a high degree of subjectivity due to the nature of the transmission constraint tagging methodology.

- 4.27 The current systems that are used within National Grid to degut operational costs were developed as in house systems to monitor and manage BSUoS, but were never developed for external publication. To provide the robustness and auditability required for published auditable half hour tariffs within a specified time after gate closure, National Grid would expect to undertake some development of the existing system systems. Further developing existing systems to produce negative tariffs for the Cost Recovery methodology would be costly and require a longer implementation period (e.g. it may not be ready for implementation on 1st April 2010). This problem is not as acute in the Simple methodology as it uses the cost and volume of the constraint averaged over a longer period of time, although the on off switch would have to be produced daily.
- 4.28 As the Cost Recovery methodology calculates ex post Overrun charges parties would not be able to make a reasoned economic judgement, prior to them occurring, about whether to Overrun in any particular settlement period. The Working Group felt that this was a significant defect of the Cost Recovery Methodology.

Marginal Methodology

- 4.29 The Marginal Methodology would calculate the marginal cost of short-term transmission access at each node, and this would be aggregated into zones, deriving a Locational Marginal Price ("LMP" for energy and transmission access) and then this would be converted into a locational Short Run Marginal Cost ("SRMC"s for the price of transmission access). LMP based methodologies are used in a number of electricity markets throughout the world, most notably the PJM market in the USA. The proposed methodology is considered as an equivalent for the GB market arrangement reflecting the differences in the energy markets (e.g. GB has a net pool not a gross pool).
- 4.30 National Grid developed a simple 12-node model and presented the results to the Working Group. This model was used to demonstrate the principles of SRMC price calculation under a number of scenarios. The model is available on the Working Group CUSC website⁷. The model has been reviewed by the Centre for Sustainable Electricity and Distributed Generation ("SEDG") at Imperial College, who confirmed that it correctly demonstrated the principles of SRMC calculation⁸.
- 4.31 The Working Group discussed the Marginal Methodology and opinion was divided as to whether this methodology gave an 'appropriate' result. Some Working Group members felt that the Marginal Methodology would provide the efficient costs of short-term access at various locations on the transmission system, whilst others either did not fully appreciate how exactly the methodology produced results or felt that the signals were too sharp and would be volatile. It was agreed that a principle of the Marginal Methodology is to provide a signal, whereas the other methodologies, to a greater or less extent, were more focused on cost recovery and avoiding any excessive additional costs on other parties who contribute to BSUoS.

⁷

http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandinggroups/wg161-<u>164/</u>

http://www.sedg.ac.uk/

- 4.32 The majority of the working group agreed that the Marginal Methodology was complex and had not been tested sufficiently to enable the Working Group to be confident, at this stage, with its output. The methodology is likely to be costly and time-consuming to implement, and is extremely unlikely to be ready by 1st April 2010.
- 4.33 Other members of the Working Group felt that the objective nature of the calculation and timely production of short run prices were important factors in facilitating the economic use of the transmission system and providing a correct incentive for long term investment. Therefore whilst it may not be implemental for April 2010 it should not be ruled out for further development and implementation in the future.

Comparison of the Overrun Costing Methodologies

- 4.34 The discussion on the merit of each methodology is detailed in the charging pre consultation, GBECM 14. The assessment of the charging methodology will be against the applicable charging objectives.
- 4.35 National Grid intends to produce an open letter to aid readers of the Company consultation on CAP162 with understanding the latest position of the associated charging developments. This will summarise National Grid's initial thoughts and the responses to charging pre consultation GBECM14.

Interaction with the provision of Balancing Services (including services such as frequency response, MaxGen Service and black start)

- 4.36 National Grid's original assumption was that all bids and offers would also need to be exposed to Overrun. In the case of bids this is because Overrun parties do not have transmission access so should not receive compensation payments when their output cannot be accommodated.
- 4.37 In the case of offers National Grid suggested that if overrunning parties did not face transmission access Overrun charges they would effectively be provided with an advantage in the BM over other Users who had purchased transmission access rights (and thereby had to recover those costs in their offered prices). Relaxation of this principle would have negative effect on competition and ramifications for all services provided to National Grid.
- 4.38 Whilst most of the group accepted this point, concern was expressed that under emergency conditions it may not be appropriate to limit provision of additional plant through transmission access charging. The Working Group agreed that Users would need to factor the risk of high Overrun charges in their offer charges if they were not granted access rights when offers were accepted. Under emergency conditions extreme prices may deter parties from offering additional capacity at less than extreme prices.
- 4.39 The Working Group agreed that for Emergency Instructions (as defined in the Grid Code) transmission access rights should be deemed as granted with the instruction. It was recognised that with much more flexible transmission access arrangements then the need for MaxGen may actually reduce. The Working Group agreed CAP162 should not remove MaxGen from the CUSC.

Settlement process, including resolution of settlement (e.g. half-hour)

- 4.40 The proposal is that transmission access settlement should be carried out on a half-hourly (settlement period) basis. The Working Group agreed. Although there may be sub-half-hour issues these effectively existed now with TEC and so should not be viewed as a barrier.
- 4.41 The Working Group agreed that changing to a sub half-hour regime would have extremely significant implications for Settlement metering process and is unlikely to be justified given most members views that overrun will be regarded as a secondary product compared to firm access.

Interaction with cashout in the BSC

- 4.42 The Working Group agreed the CAP162 proposal was unlikely to unduly interact with BSC cash out prices, although there would be a linkage as constraint prices were expected to be higher when cash out prices were higher. The Working Group acknowledged that the cash out review and attempts to remove constraint costs from the energy imbalance charges (P217) was relevant to overrun charges.
- 4.43 The group discussed the option of seeking to remove the implications of market length from the calculation of overrun prices. However the majority of the group believed that the Overrun charge should, as far a practicable, reflect the costs imposed on operation of the transmission system.
- 4.44 A request for a consultation alternative was raised by EDF Energy that sought to remove the linkage to the Residual Cashflow Reallocation Cashflow. The Working Group agreed this was worthy of further discussion, however it was a charging issues and should be discussed under the TCMF. National Grid agreed to take the proposal forward for discussion through the charging governance.

Ensuring that the arrangements do not unduly discriminate against any particular plant type or range of plant types

- 4.45 The Working Group felt that Overrun would probably be used as an incremental option and would be used to supplement, but not replace, long-term access to the transmission system. The Working Group discussed whether certain types of generation plant would use Overrun more than others.
- 4.46 Some Working Group members felt that weather dependent generators, such as wind and hydro, may seek to secure long-term transmission access to accommodate a certain proportion of their expected output and then either procure short-term transmission capacity (if procurable close to real time) and/or Overrun for the least predictable proportion of their output. The associated costs may preclude this, particularly if they choose to overrun at times when energy supply/demand and transmission capacity is tight. Although in areas of high TNUoS charges and very low load factors at high output ranges Overrun may well be attractive. Such treatment is not unlike the sizing of various modules of a Power Station (prime-mover, generator transformer, alternator etc.) to provide flexibility throughout its lifetime and meet standard procurement sizes.
- 4.47 Some Working Group members felt that in the long term, if and when high levels of weather dependent generation connected to the transmission

system, in order to provide higher plant margins, Overrun would be an economic product for plant that mainly replaced, for example, wind on non windy days. Under this scenario the replacement plant could potentially have a free transfer of transmission access from the weather dependent generation by utilising Overrun on windy days. This is because on non-windy days renewable plant would not be utilising their long-term access holdings and so the short-run access products may be relatively low cost or even zero. This would improve investment signals for Transmission Licensees as parties were not forced to purchase TEC to access the energy market, but opting to take the risk on sharing via Overrun.

Additional information transparency

- 4.48 The Working Group discussed that for Overrun to be useful, Users would need to have greater transparency of transmission system capacity so that they could judge the likelihood of a constraint arising (along with the risk of the associated Overrun charges occurring).
- 4.49 National Grid was concerned that releasing transmission system constraint information very close to real time, even ex ante, would provide inappropriate incentives for Users, which could lead to an overall increase in the cost of operating the transmission system. However, if there was information that could be made available without this risk this should be considered.
- 4.50 National Grid indicated that, in terms of Users' data, where this has been supplied to National Grid by a User, for National Grid to publish it would require an obligation in the CUSC (or other Licence code) that released National Grid from confidentiality obligations in the CUSC. System information that was not specific to a User could be released without an obligation in the Code if it was believed there was an overall benefit to the market.
- 4.51 National Grid noted that whilst constraints on the transmission system were the reason for the cost, the main driver for the costs, were generation bids and offers. Ex ante this information is not available, but it is available ex post. Indeed all bids and offers accepted in the Balancing Mechanism are available very shortly after real time. Furthermore, under the Grid Code, National Grid already provides generators with the annual transmission outage plan and information on outages that have a direct bearing on the physical operation of their plant.
- 4.52 National Grid also acknowledged that for day one market participants would not have historic information. Therefore, as part of the implementation of CAP162, additional information or simulated historic prices would need to be published. It was noted that the Scalars produced for the Simple methodology presented the average cost of constraints over a period of time and that a marginal equivalent could also be considered for publication during the development of the charging methodology.
- 4.53 It was noted there was also an interaction with the submission of Physical Notifications ("PN"s). Any information made available would need to be sufficiently in advance of the submission of Physical Notification in order to be of any value i.e. in sufficient time for parties to respond in the commercial market and submit new PNs.

Application process and impact on bilateral agreements for short-term access

4.54 The right to Overrun was envisaged to be set out in the CUSC. The local connection bilateral agreement would specify a Local Capacity Nomination (in MW), LCN, which would cap the sum of all access products and Overrun. Users would not be permitted to exceed this LCN (MW) limit, irrespective of whether they were overrunning or not. Working Group 3 developed the LCN concept and this is discussed in Section 5.

The impact on System Operator costs, internal and external

- 4.55 The Working Group agreed that there would be an impact on GBSO costs. The cost of operating the transmission system is expected to increase as a result of CAP162 being implemented. In order to ascertain the impact on GBSO costs the Working Group discussed the revenue flows associated with Overrun (see diagrams in Annex 5).
- 4.56 Under the Simple Methodology and Cost Recovery Methodology the overall cost to BSUoS payers is largely expected to be neutral as it is believed that these methodologies will generally hold third parties whole to the cost of Overrun. This is considered to be more so with the Cost Recovery methodology. The Simple methodology will not hold parties whole in any particular half hour period although it is designed to average out over a full year. In both the Simple and Cost Recovery methodologies the simplification and subjectivity will affect the overall accuracy.
- 4.57 Under the Marginal methodology, by design it is providing a signal and not aiming to be cost neutral, therefore it may over or under recover. As with the other methodologies it is assumed that this will be netted in BSUoS, e.g. a large over recovery would be passed back to the market generally in a lower BSUoS price. As discussed earlier, the Working Group consider that Overrun volume would be relatively limited, however some Working Group members suggested that it was the signal from the short run price that was important as this drove how the other long and short term transmission access products functioned. Therefore the production of an accurate short run price that is consistent with other access products is a key element of a well functioning market, along with other elements such as transparency, liquid secondary trading and well defined rights.
- 4.58 All of the methodologies would require daily settlement to be developed. For the Simple and Cost Recovery methodologies this was the critical path for implementation. In order to meet April 2010 detailed scoping of daily settlement systems needs to commence by December 2008 and development works (subject to the scoping) are expected need to have started by March 2009.
- 4.59 For the Marginal methodology the implementation of the tariff calculation software would be the critical path. Some of the Working Group members considered that a phased implementation would be appropriate, e.g. use of the Simple methodology until either the Cost Recovery or Marginal methodologies (which ever was successful) could be implemented.

A cost benefit analysis, including market impacts and the cost of carbon⁹

- 4.60 The Working Group consultation requested views on the take up of Overrun. This would assist the Working Group in determining how many additional MWs might come on line and/or how much generation with existing full access might convert to a mixture of firm and less firm (overrun) access.
- 4.61 The majority of respondents indicated that they would regard Overrun as a secondary product given the risk in any individual period and the expected higher cost of overrun over a longer period compared to TNUoS in constrained zones. Furthermore overrun may not be an appropriate product for new developers who required a bankable product. It is recognised that the bankability is dependent on the charging methodology, and an exante product may be bankable, but nevertheless most Working Group members and respondents believed Overrun was not a primary product.
- 4.62 A number of Working Group members indicated that the suite of short term proposals detracted from other models such as Connect and Manage so would have a detrimental impact on the development of renewables.
- 4.63 As discussed previously, National Grid noted that providing Users with a choice of short term entry products, long term products, along with the options of sharing and bilateral trading relied to a certain extent on a reference price. Therefore the value of an accurate and consistent overrun price should not be judged only on take up. A short term price that is too low could undermine investments and thus security of supply. Likewise a short term price to high would inflate the price of other products and possibly encourage over investment. It is recognised that investment is not solely driven by market signals from entry parties and that a review of how the Security and Quality of Supply Standard interprets market based signals and the need to provide a level of demand security.
- 4.64 The Working Group did not believe it was reasonable to make unfounded assumptions as to the level of renewable plant that may be advanced as a result of Overrun. Most members of the group felt that it would be relatively low volume, however, in conjunction with other proposal, there would be an appreciable affect. Therefore the Working Group did not produce an explicit cost benefit for carbon. However, given that overrun largely mitigated the costs on third parties any additional low carbon plant would deliver a significant proportion of carbon benefit on a unit basis compared to the cost.
- 4.65 In terms of Overrun alone, National Grid suggested that if all wind parties reduced access by 10%, or possibly more, because their actual generation at the top end of their capacity was extremely low (e.g. 5% of the output provided by the last 20% of capacity), such an effect should free up the same amount of capacity to bring forward additional projects (subject to the SQSS review). Other Working Group members doubted the effect would be this pronounced.
- 4.66 The Working Group discussed if avoided transmission investment should be taken account of in any cost benefit. The general consensus of the Working Group was that transmission was being provided as quickly as possible so

⁹ Taken account of Ofgem guidance with respect to:

http://www.ofgem.gov.uk/Licensing/IndCodes/Governance/Documents1/Code%20objectives %20letter%20-%20final%20for%20external%20publication.pdf (note link to CUSC Working Group established on carbon analysis)

avoided transmission investments should not be considered. National Grid suggest that a market based signal for Users willingness to share through Overrun and other products should improve investment signals over an administered figure for sharing in the GB SQSS. In the long term this may avoid the risk of over investment.

- 4.67 In terms of the charging methodology, Working Group members were concerned that the large expected IS costs involved in a marginal or even providing a robust Cost Recovery model prohibit their development until Overrun has been established as a useful product. Some member of the group reiterated views expressed in responses to the Working Group report that the difference between Simple and Cost Recovery model was limited in terms of implementation. National Grid indicated that whilst they largely used the same data, in the Cost Recovery model the need to process an produce a tariffs shortly after real time was more difficult that providing a table indicating which constraint zones were active.
- 4.68 Therefore most Working Group members indicated implementation with the Simple charging mechanism initially would be most efficient. This would provide most of the benefits of overrun, whilst largely protecting third parties. In order to justify a Marginal model a more robust cost benefit analysis would be required once firmer implementation costs could be established.

Efficient investment signals (for generation, transmission & interconnectors)

- 4.69 The Working Group considered whether Overrun should be restricted to use by a User that has applied for TEC, or whether it should be available to all Users. The argument for the former is that it encourages Users to commit to long term capacity and thus justifies transmission investment, as opposed to procuring short-term transmission access, and thereby the losing the correct investment signal. There is a counter-argument that it may be more efficient for some plant to be able to generate and pay Overrun without additional transmission investment being made. The Working Group identified this as an important area but there were differing views.
- 4.70 Providing that Overrun was priced reasonably cost reflectively most of the Working Group felt is was not a primary product for the majority of entry parties. Therefore National Grid would still receive investment signals through purchase of TEC.
- 4.71 How the signals from short and long term sales affected investment and interacted from signals from demand participants and influenced investment was recognised as an Security and Quality of Supply Standards (SQSS) issue. The Working Group noted that a review has been initiated in the SQSS.
- 4.72 A respondent to the Working Group consultation support a direct link between short term costs and the provisions of new capacity. The Working Group discussed this issue, recognising this is mainly a GB SQSS and price control issue. The Working Group considered that the TO investing on ST signals could disincentivise Users of the system to book long term capacity as they would rely on the Transmission Licensees to book capacity. Some members of the group considered this was the role of the Transmission Licensees whilst others recognised the need for Users of the system to book capacity in advance to provide signals for investment. National Grid indicated that building capacity on short term signals alone could lead to periods of capacity shortages given the lead time for transmission reinforcement.

Eligibility

- 4.73 The Working Group considered that Overrun was only applicable to CUSC Users who had a bilateral generation connection agreement (BCA or BEGA) with National Grid, be they directly connected or embedded. For the avoidance of doubt, parties who have a BELLA agreement are not eligible for overrun.
- 4.74 Any generator who is embedded would be able to benefit from Overrun by applying for a local connection to National Grid. This would ensure that the local transmission assets were able to facilitate overrun from the embedded generator. The charging arrangements for local assets are separate and covered in the charging methodology. The wider implications associated with embedded generation e.g. should there be a GSP export product charge (net exit arrangement) or a more direct charge (gross arrangement) are not dealt with under this amendment proposal.
- 4.75 The Working Group acknowledged that the wider arrangements for embedded generation are being reviewed and it is envisaged that any future changes to these will address any TAR related issues.

Definitions, including the interaction with other codes and methodologies, and Offshore arrangements

- 4.76 The Working Group believed that Overrun would have limited impact on other industry codes. The Working Group recognised that there could be implications on investments and understands this is being addressed in the 'GBSQSS fundamental review¹⁰'.
- 4.77 There would be a number of process and obligation changes in the STC to facilitate the revised local connection arrangements.
- 4.78 The impacts on charging methodologies have been discussed by the Working Group and National Grid has issued a pre consultation based on the Working Group discussion.
- 4.79 There may be some consequential changes to information flows to and from the BSC and these will be investigated and addressed in post acceptance analysis. Some respondents noted the interaction with the RCRC element. The Working Group discussed this linkage and agreed that this was by design i.e. a deliberate attempt to remove the effect of varying energy imbalance from the overrun price. National Grid agreed to consider this effect under charging governance.
- 4.80 The Working Group noted that the netting of BSUoS would not take place until after the II run. Therefore the accuracy of the BSUoS II statements may be slightly affected. Should volumes become large the Working Group considered that it may require a material IS development to be undertaken, which is unlikely to be justified for the initial implementation of CAP162. The Working Group was comfortable that this effect based on the expected small volume of overrun, providing it was made clear to Users.

¹⁰ http://www.nationalgrid.com/uk/Electricity/Codes/gbsqsscode/fundamental/

4.81 The Working Group did not identify any adverse impact of CAP162 on the proposed offshore arrangements, although considering their stage of development believed assessment against the final offshore arrangements would need to be assessed by Ofgem.

Payment, Credit and Security

- 4.82 The Overrun tariff cannot be predicted as it will depend on the methodology being developed. The proposal is that new Users would generally be required to forecast the volume of Overrun (subject to existing forecast arrangements for BSUoS). From this, National Grid would (i) forecast the Overrun tariff and (ii) notify Users of the appropriate security required for 29 days. This would be monitored, by National Grid, until the volume was reasonably predictable. If the volume of Overrun was larger than forecast there may be a need for Users to increase their security cover or alternatively the User would have to stop overrunning. This would require review after a set period and changes would be raised as appropriate.
- 4.83 The Working Group agreed that it was appropriate to have adequate credit and security arrangements in place for Entry Overrun. The Working Group modelled the requirements on those of BSUoS currently in the CUSC. Initially the Working Group considered the following payment, credit and security arrangements:
 - Daily charging for overrun, tariff derived from Overrun methodology
 - Payment 29 days in arrears (consistent with BSUoS / BSC)
 - DD / prepayment
 - Security required for forecast charges
 - Approximately 29 days of cover
 - Bill every two weeks for previous two weeks (-2BD), based on best available data from II run
 - For example, on 15th of month
 - Bill for previous 21 to 7 days (2 weeks)
 - Payment on starts on 21st and daily through to 21st +14 days for the previously billed days
 - Overrun would not be taken account of in Logica II 'BSUoS advice note'
 - Overrun would feed into Logica SF run which initiates BSUoS payment (i.e. BSUoS payment should take account of Overrun receipts)
 - Reconciliation at end of financial year, by end of April, result feeds in to BSUoS reconciliation (May)
- 4.84 However, the arrangement above would only leave 1 day's notice of terms under certain circumstances (time from billing to payment). Therefore National Grid is proposing weekly billing that would be closer to the BSUoS timescales (daily). The 2 weekly billing process was designed to avoid significant system changes, moving to weekly billing will increase the potential for IS systems changes and may slightly increase the resources involved. National Grid will be scoping out the detailed IS requirements which are linked to the manual resources.

- 4.85 The illustrative diagram in Annex 6 shows how it is envisaged the Settlement calendar will operate on a normal month.
- 4.86 For the avoidance of doubt, reconciliation does not include changes the published Overrun tariff (or any on /off switch), but covers changes to metered volumes.

Impact on the demand (exit) arrangements

- 4.87 The Working Group considered the possible interaction with the demand (exit) transmission charging arrangements. CAP162 Overrun will only apply to entry parties (generation).
- 4.88 Under the Marginal methodology, the demand side could be included. The Working Group felt that it is not clear from National Grid's initial Marginal methodology analysis whether the exclusion of the demand side has a significant impact. National Grid indicated that the overall assumption was that all demand had firm rights, thus did not require Overrun as an option. It was suggested that this was an opportunity lost.
- 4.89 National Grid indicated that linking overrun to exit reform would be extremely complicated and would delay the introduction of Overrun. One of the main objectives of raising CAP162 was to facilitate new entry in a timely manner. For this reason, the expedient introduction of improved entry arrangements, exit reform had not been included. However, reform of exit should not be excluded from future introduction by CAP162.

Overall revenue recovery (TNUoS, BSUoS and other charges)

- 4.90 The Working Group considered the effects of Overrun on overall revenue recovery. It is not clear how the TOs' income in the long term would be affected, as this depends on whether a significant amount of generation decides to Overrun and avoids paying long-term transmission access costs (this will depend on whether the Overrun tariffs give the appropriate cost signals). In the short term National Grid collects the allowed revenue through TNUOS, if parties switched over to Overrun the residual element would increase. Treatment of the residual is being discussed under changing governance. The Working Group felt consideration should be given to this in the TO price control reviews as Overrun may result in insufficient investment signals to the TOs and/or increased charges for Users that do not Overrun and pay charges for long-term transmission access.
- 4.91 If Overrun costs are not allocated effectively to parties causing them then the resultant costs (positive or negative) will be socialised in BSUoS. Potentially, non-overrunning generation and demand may be affected in respect of either higher or lower levels of BSUoS. However, the methodologies have been designed with the Overrun principles in mind and if necessary could be reviewed at a later date.
- 4.92 The Working Group agreed that National Grid should have an incentive to minimise the cost of Overrun even though it was targeted. It was suggested that as the volume and cost was included in the overall BSUoS budget, incentivisation through the BSIS scheme may be appropriate. National Grid suggested there may be some adjustments required to the BSIS scheme to take account of the unpredictability associated with Overrun, similar to market length adjustments, but in principle BSIS style incentivisation could be investigated. The Working Group recognised that this was an issue that

Ofgem and National Grid would need to discuss with the Industry in any CAP162 implementation period.

Impact on Security of Supply

- 4.93 Some of the Working Group considered that Overrun would not impact on Security of Supply as generators are already, in extremis, allowed to generate above their transmission capacity holding under emergency conditions under the current arrangements. However, other Working Group members noted that such (emergency conditions) capacity was: (i) outwith of the control of the generator to utilise (National Grid had to invoke it); (ii) uncertain in terms of when it might occur; and (iii) for example with MaxGen, could be limited in volume and duration. This would not be the case with Overrun, which could, in the extreme, be utilised by a generator for 8,760 hours a year for 100% of their power station output.
- 4.94 Some Working Group members considered that Overrun could actually be detrimental to the Security of Supply if it led to Users relying on short-term transmission access which did not provide the necessary long-term transmission system investment signals. This could lead to inadequate transmission capacity being built in the required timescales.
- 4.95 National Grid indicated that any impact on investment of Transmission Licensees was covered by the GBSQSS, which is undergoing a parallel review.

Impact on Maintenance of the Reliability, Safety & Operation of the Grid

- 4.96 National Grid did not identify any negative impacts other than the GBSO taking more actions to compensate for Overrun, which manifests itself as a cost.
- 4.97 All overrunning parties must continue to comply with the Grid Code. Each generator will submit accurate Physical Notifications and data as per the Grid Code. The Working Group accepted this view from National Grid. It was expected that the GBSQSS review would consider this issue further.

Limiting participation to physical parties

4.98 The Working Group understood that to Overrun a party would have to have metering so Overrun was not relevant for non physical parties. However, the Working Group understood that a metered party could take out a hedge with a third party on Overrun prices, although most Working Group members thought this unlikely. In addition, it was not clear to some Working Group members that non physical parties could become party to the CUSC (and thus avail themselves of Overrun).

Interaction with the other proposed CUSC Amendment Proposals

4.99 Overrun is one of a number of potential short term and long term transmission access products available to Users assuming they are approved and implemented. Overrun is a product for Users who do not wish to obtain access to the transmission system via long and medium term transmission access products (such as, currently, TEC, LDTEC, STTEC or trading TEC) or, in the future, if one or both of CAP161 and CAP163 is implemented short-term SO (capacity) Release or Sharing with another User. There is potentially a strong interaction between CAP162 and CAP163 (Sharing) as

the ability to Overrun will prevent sharing parties from being in breach of the CUSC if they exceed their shared transmission access level.

4.100 Overrun will also act as a competitor to SO Release and to TEC Sharing and trading, allowing parties a choice of obtaining capacity above TEC in more than one way i.e. introducing some contestability in obtaining capacity above TEC.

5.0 SUMMARY OF WORKING GROUP 3 DISCUSSIONS

Generation zoning

- 5.1 National Grid recommended that in light of the proposed suite of CUSC Transmission Access Review Amendments (namely CAPs 161, 162, 163, 164, 165 and 166), it might be appropriate to move away from the existing TNUoS generation zones and develop a set of zones which better facilitate the release of transmission access via SO Short-term Entry Rights (CAP161), Entry Overrun (CAP162), Entry Capacity Sharing (CAP163), Long-term Finite Rights (CAP165) and Long-term Entry Capacity Auctions (CAP166). To help facilitate this work on zones the CUSC Amendment Panel established a separate group, known as Working Group 3, to assist Working Groups 1 and 2.
- 5.2 At the second meeting at Working Group 3 on 27th May 2008, National Grid introduced two separate generation zoning options in the form of: (i) a Scenario-based Zoning Methodology ("SZM"); and (ii) a Network-based Zoning Methodology ("NZM"). Both methodologies were proposed on the assumption that:
 - local reinforcement works required to connect a generator to the MITS (and therefore make use of transmission capacity) are achievable;
 - the resulting zones facilitated TEC exchanges within zones on a 1:1 basis; and
 - limits (MW) at points of connection can be 'aggregated' in terms of their effects on wider transmission system constraints.

Scenario-based Zoning Methodology ("SZM")

- 5.3 The SZM considered the actual boundary constraints of the transmission system and followed the process of: (i) identifying candidate boundaries; (ii) identifying critical circuits for these boundaries based on the required transfer level specified within the GB SQSS; (iii) the calculation of sensitivity factors at all nodes with regard to critical circuits; and (iv) the grouping together of those nodes which have similar sensitivities.
- 5.4 In practice, candidate boundaries were identified manually based on the operational boundaries of the transmission network. The worst critical contingency and circuits were then identified against the indicative boundary. Sensitivity Factors were then calculated for each node by 'injecting' an additional 100MW of generation at each node within a zone and calculating the resultant flows on each of the relevant critical circuits under a contingency. Those nodes of Sensitivity Factors within a range of 20 percent were then grouped together.
- 5.5 The advantages of the SZM were observed as being that:
 - maximum tradable transmission capacity within a zone could be derived from Sensitivity Factors for the winter peak scenario;
 - the grouping of nodes of similar Sensitivity Factors into zones gives greater clarity and certainty to zonal transmission access; and

 additional constraint costs are minimised because actual transmission network constraints are honoured.

It was also noted that the publishing of nodal Sensitivity Factors leads to an indicative economic optimisation for TEC exchange.

5.6 The disadvantages of the SZM were noted to be that critical circuits tend to 'move' in meshed networks and that they are scenario and contingency dependent. Additionally, it was noted that zones developed under the SZM are unlikely to remain stable over a number of years due to changes to the transmission network and the demand and generation background.

Network-based Zoning Methodology ("NZM")

- 5.7 The NZM did not consider actual transmission boundary limitations, but worked on a 'hub and spoke' principle, considering the change in voltage angles resulting from the exchange of TEC at individual nodes as the parameter for determining relevant zones. It was identified that under the NZM, zones might be considered to be less likely to change so long as the network topology and impedance of the transmission network did not change significantly. And, where the SZM studied a few 'snapshots' of the transmission system, the NZM did not rely on a specific scenario being studied, hence providing more stability to the zones in the long-term.
- 5.8 Limitations of the NZM were identified to be that the choice of hub-node used to determine the zones was critical to the zonal definition and likely to have a significant impact on a generators ability to exchange transmission access rights. Additionally, it was noted that actual transmission system constraints might not be fully reflected.

Working Group 3 discussion

- 5.9 Working Group 3 noted that a significant amount of further information and analysis of both options was required, including the estimated total effect on transmission constraints, the stability of zones and the 'liquidity' of capacity exchange.
- 5.10 Working Group 3 questioned as to whether it would be possible to overlap zones in the NZM, or even have a unique zone for each node to maximise tradability. Concern was expressed however, regarding the impact of sequential trades from zone to zone and the potential impact of this on constraint costs.
- 5.11 In addition to the SZM and NZM, Working Group 3 questioned the possibility of the publication of node to node exchange rates in preference to zoning. The presentation slides regarding the SZM and NZM can be found on the National Grid Codes website.¹¹

Indicative generation zones

- 5.12 At the fourth meeting of Working Group 3 on 16th June 2008, National Grid presented some indicative generation zones based on both the SZM and NZM. Zoning for regions that are radial in nature was relatively simple, the zoning process however, was much more difficult due to the presence of loop-flows.
- 5.13 It was noted that in the short to medium term (circa 2-3 years), National Grid (as the GBSO) can arrive at larger generation zones which may better

¹¹<u>http://www.nationalgrid.com/NR/rdonlyres/9A797D89-2BC2-459C-A3C7-744F3212109F/25954/Meeting2Zoning.pdf</u>

facilitate the exchange of transmission access rights due to the greater certainties associated with background conditions and operational measures. In the longer-term however, it was considered that smaller generation zones would be required to cater for increased uncertainty.

- 5.14 In general, a number of key issues and findings were noted:
 - Generation zones were generally different from the existing TNUoS generation charging zones.
 - Short-term zones can be much bigger than the long-term zones, and they can change from time to time.
 - In a meshed network, the effect of loop-flows may increase the percentage loadings on critical circuits and make it difficult to define zones.
 - The definition of local works will affect zoning criteria.
 - Being geographically proximate does not necessarily mean being electrically proximate, especially when substations are operated in a "split" configuration. In this instance, re-arranging of busbar sections or substation uprating may be required to facilitate TEC sharing.

Working Group 3 discussion

5.15 Working Group 3 noted the importance that any new zoning methodology should be suitable for all long and short-term transmission access products proposed under the suite of CAP161-166 amendments and gave consideration to the trade-off between the potential increased costs of operational constraints, the liquidity of absolute trades, and the number of nodes in each zone. It was considered that zones should be based on capability (e.g. local connection capacity) rather than obtained long-term transmission access rights (TEC or its equivalent).

Hybrid zoning methodology

- 5.16 At the fifth meeting of Working Group 3 on 1st July 2008, National Grid presented some indicative generation zones based on a hybrid (of SZM and NZM) zoning methodology, in that a critical trip was applied (under n-d) with 100MW injected at each of the rim nodes and then extracted at the hub node. Following this, the loading of all lines under a combination of every rim-rim, rim-hub pair was analysed. If a loading increased by more than 20MW, this was then considered to be a 'sensitive' case. The exercise was repeated for a number of other critical trips with a sense check undertaken prior to determining the zones.
- 5.17 The methodology applied to determine a set of zones was as follows:
 - 1. Set local works and size of zones (2 of the 3 variables excluding constraints).
 - 2. Identify active constraints based on existing knowledge of that selected zone.
 - 3. Calculate the volume of additional constraints based on:
 - NZM sensitivities;
 - Load factors of buying and selling generators to calculate the volume of potential tradability.
 - Use realistic outage windows to estimate the number of hours of potential exposure to constraints.
 - 4. Estimate the costs of constraining off and replacement energy.

Operational constraint costs

5.18 In addition to presenting some indicative generation zones and some of the issues surrounding the zoning process, consideration was given to the

balance between facilitating transmission access tradability within zones and the consequences of constraint costs and stability.

- 5.19 Operational constraint cost is calculated based on the volume of active constraints (MWh), multiplied by the cost (£/MWh) of these constraints. It was noted that a small generation zone will lead to less trading options, though this might not necessarily be considered as a 'low' level trading. Working Group 3 members considered that a potential % cap of total zonal trades should ideally, be the same for all generation zones, although different zones may permit a far larger volume of transmission access trade for the same operational cost risk. It was considered that a limit could be set as a function of the load factor of generators, or proportions of the total transmission access capacity (MW) within a zone.
- 5.20 National Grid presented some high level analysis on the volume of additional constraints and the associated cost of this, based on a mid depth local works definition and the exchange of between 25-100% of TEC within a zone when compared to existing constraint costs of approximately £80m per annum.

Working Group 3 discussion

- 5.21 Working Group 3 noted that there is a trade-off between (i) nodal tradability, (ii) maximum zone size and (iii) how much local works must be completed prior to transmission access being allocated. For example, if a deep definition of 'local works' is applied then, as a consequence, zones are likely to be larger. It was reiterated that the existing assumption is that when transmission access is exchanged or shared, resulting in additional constraints, this additional cost will be socialised amongst all transmission system Users.
- 5.22 Working Group 3 noted that there are three different areas in the TAR proposals where local assets and works are defined: (i) within the CUSC; (ii) for local charging purposes; and (iii) within the zoning methodology. Working Group 3 considered that the disconnect between the actual local works that are required for a connection and the local charge which the User will pay may be necessary to:
 - Avoid circumstances in which there would be a permanent output restriction on a generator being connected; and
 - Protect the individual generator from the actions of others or the decisions of the Transmission Owner.
- 5.23 The Working Group noted that having separate definitions may be consistent with the way in which current Construction Agreements list the incremental works required to accommodate generators, with the generator paying the Long-Run Marginal Cost (LRMC) derived from the Investment Cost Related Pricing (ICRP) transport and tariff model. However, the Working Group subsequently agreed that different CUSC and charging definitions may lead to Users getting access rights without facing the associated cost reflective charge, as described in 5.84 below.
- 5.24 Working Group 3 considered that the stability of zones was very important and therefore new generation zones should not be developed in this process on the premise that zones are acceptable at present, but there may be issues

to address in the future. The presentation slides relating to the hybrid zoning methodology can be found on the National Grid Codes website.¹²

- 5.25 At the sixth meeting of Working Group 3 on 16th July 2008, National Grid presented some indicative generation zones, using a 'mid depth' definition of local works and a lower Sensitivity Factor limit (20%). In order to avoid significant local works reinforcement conditions, very small zones were created which based on previous Working Group 3 discussions, were considered too small. However, it was noted that to fully appreciate the 'size' of zones, it is the number of trading parties and the amount of tradable transmission access capacity within a zone that should be considered more relevant than the geographic area.
- 5.26 In parallel, National Grid presented some further analysis on indicative generation zones based on a 'deeper' definition of local works, to assess how this may increase the tradability of transmission access. Several Indicative zones were created although it was noted that it was not possible to zone certain regions such as East Anglia on the basis of the deep definition, without invoking local works designs that were economically inefficient. In general, it was considered by the Working Group that moving to a deeper definition of local works did little to increase the size of zones and the potential liquidity of access sharing.
- 5.27 Working Group 3 noted that stability at nodes is important, but the possibility of considering (i) nodes with existing generation and (ii) nodes with signed applications (to connect to the transmission system at some date in the future) should be explored. This was not necessarily perceived to provide stability to zones beyond a 3 to 5 year period, but it was deemed workable if a fully automated and transparent model can be made publicly available to the industry.

Generation zoning and nodal exchange rates

- 5.28 At the seventh meeting of Working Group 3 on 29th July 2008, National Grid recapped on the generation zones which had been presented to date, noting that these were based very much on existing generation centres, existing demand centres and radial spurs.
- 5.29 When identifying the generation zones, a number of factors had been raised as requiring consideration, particularly as to whether generation zones should be developed with a view to them being short-term or long-term, and whether they should be based on physical transmission system boundary limits or the additional constraint costs that these would be likely to produce. Given the complexity of zoning, attention of Working Group 3 turned to giving consideration of inter-zonal TEC exchange of transmission access.
- 5.30 The options considered included the determination of a nodal 1:1 exchange rate based on the physical transmission network rather than generation background, which should therefore be temporally stable. This option would need to consider both long-term and short-term timescales, local charging definition and reflect network contingency analysis.
- 5.31 The second option was for a Locational Marginal Pricing ("LMP") based approach for setting point-to-point rights. This bid-based approach can

¹² <u>http://www.nationalgrid.com/NR/rdonlyres/1E709B88-B313-47B7-9835-</u> 2424C283798C/26845/GenerationZoning_final_meeting5.pdf

accommodate multiple constraints and payments would be made into a 'pool' based on the cost as compared to a hub point. Working Group 3 had concerns that the results would be volatile and that there would be less transparency behind the prices. In addition, the approach was felt to be complex.

- 5.32 Alternatively, a 'flowgate' approach was considered which would look at the physical capacity of constraining transmission circuits. This was felt to be a substantial change to existing transmission access rights, and with the example of around 1.5 billion nodal calculations per year required to update the Flowgate rights, Working Group 3 felt that this option was the most complex to implementation and was prone to volatility.
- 5.33 The last option considered was the use of a nodal exchange rate using a MWkm methodology. Consideration was given to using the Direct Current Load Flow ("DCLF") transport model currently used to calculate TNUoS tariffs, to calculate nodal exchange rates for transmission access. This option involved taking into account various sets of contingencies, with the added advantage that some automation to identify all circuits was already available in the form of the Secured Load Flow model used to calculate to Global Locational Security Factor in TNUoS tariffs.
- 5.34 The weaknesses of this option were noted as being that the use of MWkm as a measure, does not equate to a critical circuit flow and as a result, overestimated transmission access exchange rates had already been identified at this early stage and would continue to be a significant risk. In addition, it was noted that there was no correlation to overloaded flow and the increase in GBSO costs that would be associated with this.
- 5.35 At the eighth meeting of Working Group 3 on 13th August 2008, as well as further developing the principle of a zonal methodology based on nodal exchange rates, National Grid introduced a zonal alternative and a nodal alternative.
- 5.36 **Nodal exchange rates**: A step by step methodology was discussed for establishing zones through grouping nodes between which the exchange rate fell within a certain range. Example exchange rates were shown for a particular approach based on specific assumptions. The approach was based upon worst-case contingencies in order to establish exchange rates, where the resultant zones would have minimal constraint costs arising from the exchanges. Transmission access exchange rates were shown for one set of possible assumptions. Working Group 3 was comfortable with the exchange rate discussed, which reflected the different impacts on a specific circuit from different nodes, but expressed concerns that under various critical trips the exchange rate may change significantly.
- 5.37 **Zonal alternative**: An alternative is to use zones that have already been defined (e.g. SYS, charging or candidate short/medium term generation zones), then the impact of such (i.e. increase in constraint costs) could be examined for an agreed suite of assumptions and scenarios. The working group agreed that careful assumption must be made around likely projects connecting and TEC sharing behaviour.
- 5.38 **Nodal alternative:** Working Group 3 considered an ex ante nodal exchange rate approach. The total impact on constraint costs is mitigated when Users who wish to share, notify the SO of the specific nodes between which the transmission access will be shared in addition to the maximum size of trade.

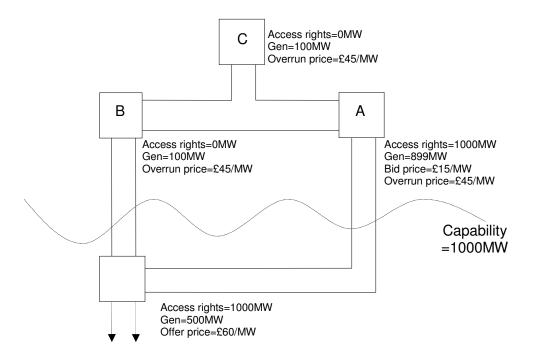
This allows a more robust exchange rate to be established. Once granted sharing could occur over any timescale; without exposure to nodal overrun charges.

Sharing access rights between nodes

- 5.39 Given the issues identified with establishing zones in which sharing with a 1:1 exchange rate is allowed, at the ninth meeting of Working Group 3 on 22nd August 2008, the Working Group gave some further consideration to some potential options for sharing transmission access between nodes, without the requirement for generation zones. Three models were considered (the presentation is available on the National Grid Codes website):
 - (a) Sharing with exchange rate determined by ratio of nodal (ex post) Overrun prices;
 - (b) Sharing with fixed point to point exchange rate calculated by National Grid based on known volume and duration; and
 - (c) Sharing facilitated by the release of point to point transmission access rights by National Grid in investment timescales.

Exchange rate determined by ratio of nodal Overrun prices

- 5.40 Under this option, the User would notify National Grid of a sharing arrangement agreed bilaterally between two parties. National Grid would then calculate exchange rates based on (ex post) overrun prices. The results from these calculations would then form the inputs into the calculation of overrun volume.
- 5.41 Whilst overrun prices allow Users to share transmission access rights to an extent, Working Group 3 considered that there was an issue with a bilateral exchange being affected by a third party generating, which would consequently affect the overrun prices and exchange rates
- 5.42 If we consider the simplified example (shown in the diagram below) of two generators behind a constraint, generator A has long-term transmission access rights and generator B does not. The overrun price increases above zero only if the aggregate output from both generators exceeds the long-term rights held by generator A. This means that provided generator A reduces output whenever generator B wants to generate, the overrun price faced by generator B will be zero.



- 5.43 This arrangement would break-down if there was a third generator, generator C, generating without transmission access rights behind the same constraint. The output from generator C could also cause the overrun price to increase above zero, undermining the effectiveness of the sharing arrangement between generator A and generator B.
- 5.44 In these circumstances, generator A is not able to extract the full value of their transmission access rights due to the actions of a third party. This would be solved if generator A and generator B were to enter a sharing arrangement with the associated transmission access exchange rate based on the ratio of the (ex post) nodal overrun prices. Now, if generator C decides to generate, this would push the overrun price at the generator A node and the generator B node such that the exchange rate remains constant.
- 5.45 In more complex examples, the actions of generator C may cause the exchange rate between generator A and generator B to diminish, as there would be a constraint between generator A and generator B, but the value of generator A's transmission access rights at generator B's node would always be accurately reflected.
- 5.46 Working Group 3 considered the following high-level process for exchange rates determined by the ratio of overrun prices, noting that this option for sharing transmission access rights was reliant on the approval of the CUSC amendment (CAP162) to introduce overrun prices calculated in a cost reflective manner. The Working Group subsequently agreed that this option was only applicable with overrun with a marginal price, as described in the Final Conclusions from Working Group 3 below.
 - (a) Users notify National Grid of sharing arrangement
 - i. It has been assumed that a joint request for a sharing arrangement would be made by a User with transmission access rights (seeking to donate) and a User without transmission access rights (seeking to receive).
 - ii. The request would state a 'go-live' date and 'end-date' for the arrangement, along with a maximum capacity in MW. The

maximum capacity is included to allow a User to donate to a number of receiving Users.

- iii. The request would need to be made [x] days ahead of time to allow for the necessary administrative process to be undertaken.
- iv. The Sharing arrangement and associated 'go-live' date and 'enddate' would need to be recorded in a central register.
- (b) National Grid calculates transmission access exchange rates based on ratio of (ex post) overrun prices
 - i. For a donation of transmission access rights from node A to node B, the exchange rate would be calculated as:

Exchange rate = $\frac{Overrun \ price_{Node \ A}}{Overrun \ price_{Node \ B}}$

Therefore, if the power station at node A reduces output to 100MW below its total transmission access rights holding, and the overrun prices are \pm 45/MWh at node A and \pm 50/MWh at node B, this would provide for the following at node B:

$$100MW \times \left[\frac{\pounds 45 / MWh}{\pounds 50 / MWh}\right] = 90MW$$

- ii. This calculation would be performed for each half-hour for which the sharing arrangement is valid (i.e. between 'go-live' date and 'end date'.
- (c) Results from calculations in (b) form inputs to calculation of overrun volume
 - i. It should be noted that this calculation is reliant upon overrun prices being calculated prior to the final volumes of overrun being known. (This cannot be done for the Cost Recovery methodology)
 - ii. The volumes of overrun at each node would need to be corrected for these exchange rates. If, in the example above, a generator at node B without access rights generated 100MW, this would initially be considered as 100MW of overrun, but the exchange rate would then be calculated which would essentially show a 100MW donation from node A providing 90MW of transmission access rights at node B and the overrun volume would be corrected from 100MW to (100MW-90MW=) 10MW.

Fixed point to point exchange rate calculated by National Grid

- 5.47 Whilst option 1 (exchange rate determined by ratio of nodal overrun prices) may be acceptable for Users that are reasonably (electrically) proximate, this is unlikely to be the case for generators that are further apart, due to the increased risk of a binding constraint that effects the receiving (but not the donating) generator. In order to facilitate sharing for these power stations, National Grid could calculate a fixed transmission access exchange rate that could be applied.
- 5.48 The work to investigate 1:1 sharing within pre-defined zones has identified significant risks due to actual node to node exchange rates being dependent upon:
 - (a) The volume of transmission access rights shared: A node to node exchange rate calculated based on a transfer of 1MW may be incorrect for a transfer of 10MW, 100MW or 1GW.
 - (b) Other transmission access right sharing: The exchange rate between nodes A and B may be incorrect if there is a transfer between nodes C and D.

- (c) Other time dependent transmission system conditions: On the day transmission system conditions, such as demand and circuit outage conditions, also impact on node to node exchange rates.
- 5.49 In order to ensure that reasonable node to node exchange rates can be calculated, the User would need to minimise uncertainty by specifying the maximum volume of transmission access rights to be Shared and the timing and the duration of the sharing arrangement.
- 5.50 Working Group 3 considered the following high-level process for fixed point to point transmission access exchange rates calculated by National Grid.
 - (a) Users apply to National Grid for a fixed exchange rate
 - i. It has been assumed that a joint request for a sharing arrangement would be made by a User with transmission access rights (seeking to donate) and a User without access rights (seeking to receive).
 - ii. The Users would be liable to pay a fee to cover the cost of the analysis performed by National Grid.
 - iii. The request would state a 'go-live date' and 'end-date' for the arrangement, along with a maximum capacity in MW. As described above, the fixed duration and maximum volume information is required to cap the risk associated with the sharing arrangement, allowing the SO to calculate a reasonable fixed exchange rate.
 - (b) National Grid calculates fixed point to point exchange rate
 - i. The request would need to be made a number of weeks ahead of time to allow for an engineering assessment to be undertaken by National Grid (the number of weeks of analysis would depend on the duration of the exchange rate).
 - ii. For applications for exchange rates within the current operational year, the assessment would be based on the current transmission system and would be performed against the requirements of the operational criteria contained in the SQSS. This assessment would reflect the information that is available in these timescales, including demand level and planned transmission system outages.
 - iii. For applications for exchange rates that go beyond the current operational year, the assessment would be against the current and committed transmission system (including planned reinforcements) and would be performed against the requirements of the planning criteria contained in the SQSS.
 - iv. [Subsequently agreed that this assessment should not increase socialised constraint costs or sterilise boundary capability]
 - (c) National Grid offers fixed exchange rate and User has 2 weeks to accept. If accepted, the Sharing arrangement and associated 'go-live date' and 'end-date' would need to be recorded in a central register and used in overrun volume calculations and future 'applications' for capacity/exchange rates. The appropriate charge for this was considered to be a cost-reflective fee based on the administration costs.

Point to point access rights released by National Grid

5.51 In the event that a fixed transmission access exchange rate provided by the aforementioned option above was considered to be unacceptably low, Users may want the Transmission Owners to invest in order to achieve a point-to-point capability. Such investment could be minor (and therefore relatively quick) when compared to the investment required to provide that same User with full entry rights.

- 5.52 In this option, a User would apply to National Grid for a transmission access right between [Node A] and [Node B] for a maximum of [x] MW and a duration of [Y] years. National Grid would then assess that application against the current planning baseline with an additional [X] MW of generation at Node A and an additional [X] MW of demand at Node B.
- 5.53 National Grid would then offer a point-to-point transmission access right to the User, with the offer including a list of reinforcement works triggered by that application. In the event that the User then accepts this offer, a point-to-point right is only available when reinforcements have been completed. The point-to-point right is recorded and used in overrun volume calculations and future 'applications' for capacity / exchange rates / point to point rights. It was considered appropriate that a User should pay the TNUoS differential between Node A and Node B for [Y] years.

Cost of Constraint Analysis on the Short/medium Generation Zones

- 5.54 The expected impact from implementation of the proposed short/medium term generation zones was presented during the tenth meeting of Working Group 3 on 12th September. An examination was made of the potential additional costs of constraints incurred as a result of transmission access sharing within zones. National Grid noted that where generators are permitted to connect to the transmission system without the requirement to undertake wider system reinforcement, this is likely to result in additional system boundary constraints and increase the constraint volumes on the existing constraint boundaries.
- 5.55 Working Group 3 considered that further thought regarding the range of assumptions was required in the pursuit of calculating the utilisation element of constraint cost. Problems with trying to make predictions about future constraint cost trends from using historic SO costs were identified. It was noted that in a zone which flips between importing and exporting, it is not appropriate to attribute a cost to the boundary constraint under a winter peak scenario as it might not always be obvious if costs are related to an export or an import. In these cases, the data used needs to be further analysed to properly attribute an export or import cost against the corresponding linear trending in export or import utilisation.
- 5.56 The locational element of constraint cost was also analysed. One to one trading was considered to be acceptable up to a point of 'headroom', beyond which a specific point to point arrangement would be required. It was noted that any trade undertaken will change the size and validity of the headroom. It was considered that this headroom figure could be fixed for a year, with some risk of an increase in constraints prior to re-calculation in the following year.

Initial Working Group 3 Conclusions

5.57 Prior to the eleventh meeting of Working Group 3 held on 24th September, National Grid circulated a report¹³ that examined the potential additional costs of constraints that would be incurred by the sharing of transmission access within generation zones. The additional utilisation and location costs are calculated using a set of proposed generation zones. The calculations presented have considered factors including headroom, sensitivity factors and loading curves from the generators. The results indicated a total (utilisation + location elements) additional cost of constraints of about £37m per annum if trading up to the headroom level only is allowed. If trading

¹³ <u>http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandinggroups/wg161-166/</u>

beyond the headroom was undertaken up to 2 times the headroom, the cost of constraints could potentially rise to \pounds 1.1 billion per annum for the upper range and a potential saving of about \pounds 0.2 billion per annum for the lower range. The \pounds 0.2 billion saving is the total cost of constraint from the utilisation element plus the average historical cost of constraint that can be saved. The actual cost would vary depending on the system running arrangement, the characteristics of the generators and the duration of transmission access exchange.

- 5.58 During this eleventh meeting, a summary of the options considered was made. A zoning methodology that results in small zones, with a minimal increase in constraint costs, severely limits the liquidity of tradable capacity. The Working Group recognised that methodologies that form large trading zones provide greater tradability, although the increased operational constraint costs which could result from such zones was considered too great a risk. The remaining options are:
 - a. Larger zones, with trading limited to headroom on a point to point and beyond basis, with an allocation process for headroom and subsequent re-allocation process following the completion of a trade, was considered as a viable option by the Working Group. The downside however, was identified as being the complexity of the arrangements which would be required, the potential for hoarding capacity and that trades would be limited to within-zone; or
 - b. A nodal point to point option for the sharing of system access which the Working Group also concluded was a viable option.

Final Conclusions from Working Group 3

- 5.59 The final Working Group 3 meeting was held on the 10th November, during which the key issues and areas for further confirmation from the consultation phase were discussed. One Working Group Consultation response stated that zones will lead to increased shared constraint costs but conversely, an overly pessimistic methodology may lead to under utilisation of capacity sharing. The Working Group concurred that the analysis previously presented showed that a zonal methodology with large zones has a significant risk of increasing total socialised constraint costs. National Grid discussed how, when determining nodal exchange rates, all feasible worst case system operation scenarios must be considered, in order to meet the principle of maintaining cost levels.
- 5.60 A respondent stated that a node to node exchange rate that was significantly different from 1:1 would reduce the effectiveness of sharing. Working Group 3 concurred and reiterated that this is likely to lead to sharing to occur mainly between proximate generators and it was concluded that the exchange rate should be capped at a maximum of 1 to 1 in order to prevent the ability for a User with multiple generators to book capacity and share it in order to minimise transmission charges. A view was expressed in a consultation response that capacity entry sharing should be available in both long term and short term timescales to which the Working Group agreed, although it was recognised that exchange rates may differ between the two as certainty increases towards real time.
- 5.61 A respondent stated that a nodal exchange rate methodology must be robust and transparent, but it is felt that this may introduce unnecessary complexity and therefore cost. Whilst the Working Group agreed nodal point to point

exchange rates requires a degree of complexity, ultimately it avoids the requirement to achieve a balance between limiting zonal tradability with an onerous headroom limit and introducing unacceptable risks through significant increases in socialised constraint costs. Working Group 3 therefore concluded that a node to node exchange rate methodology should be applied.

- 5.62 A respondent questioned how exchange rates based on zonal overrun prices would be calculated. The Working Group discussed the options for overrun pricing set-out in Charging Pre-consultation GB ECM-14 (Consequential impact of CUSC amendment proposals: CAP161, CAP162, CAP163 and CAP164). The options are:
 - (i) Simple Methodology;
 - (ii) Cost Recovery Methodology; and
 - (iii) Marginal Methodology.
- 5.63 The simple methodology is based on historic constraint data, which is mapped to 24 indicative constraint zones. This means that all the nodes in a particular zone would be subject to the same overrun price. The Working Group noted that implementing node to node exchange rates based on these overrun prices would essentially allow unfettered sharing with a 1:1 exchange rate within these zones.
- 5.64 The Working Group agreed that whilst these zones may give the appropriate level of accuracy for a simple pricing methodology (where the impact is limited by the Local Capacity Nomination), the analysis performed previously would suggest that allowing sharing on this basis would cause an unacceptable increase in socialised constraint costs. For this reason, the Working Group agreed that node to node sharing with exchange rates based on the ratio of ex post overrun prices should not be an option with the simple overrun pricing methodology.
- 5.65 Where the cost recovery methodology is based on a "degut" of the actual costs performed ex post by the System Operator, a methodology is used to attribute actual costs to the volume of overrun to calculate a £/MWh overrun price. Whilst, unlike the simple methodology, this cost allocation will be nodal, the Working Group agreed that this methodology would be inconsistent with node to node sharing based on the ratio of overrun prices. This conclusion is based on concerns about the interaction between the derivation of the price and volume of overrun (i.e. it would not be possible to calculate the overrun price until the overrun volume is known, and with sharing the volume is not known until the ratio of overrun prices is determined).
- 5.66 The marginal methodology is based on a model of the transmission system which is optimised to minimise system balancing costs. The optimisation generates nodal marginal overrun prices (shadow costs). The Working Group noted that this pricing option was at an early stage of development, but agreed that provided it was developed such that truly nodal (rather than boundary based) prices were produced, then it would be appropriate for use with node to node sharing with the exchange rate determined by the ratio of nodal overrun prices.
- 5.67 In summary, the Working Group agreed that node to node sharing with an exchange rate based on the (ex post) overrun prices should only be implemented if the marginal overrun pricing option is implemented.

- 5.68 One respondent specifically sought clarification for how codification could be implemented when three or more parties are involved in the transfer if the exchange rate is not 1:1. If different exchange rates are set for each exchange (there could potentially be 6 exchange rates for 3 parties) the codified approach would need to allocate TEC between parties such that monitoring can take place. The Working Group agreed that in cases where three or more parties are involved in the share, complex arrangements would be required to ensure an efficient outcome. Furthermore, the Working Group agreed that the number of parties involved in a share should be limited to two at this stage, but that this limitation should be reviewed when there is some experience of the sharing arrangements.
- 5.69 Several respondents to the Working Group Consultation requested clarification of how node to node access capacity exchange rates would be calculated. The Working Group agreed that further illustration would provide additional clarity.
- 5.70 The Working Group agreed that the basis of the exchange rate should be to "leave the system whole" such that any spare boundary capability is not used up and there are therefore no concerns about node to node sharing arrangements sterilising boundary capability.

Offshore generation

5.71 Working Group 3 gave consideration to offshore generation and how this would be incorporated into zones. It was noted that offshore generation is currently being modelled at the landing point, assuming a radial connection and Grid Code compliance at the point of connection.

Governance

- 5.72 Two approaches towards the governance of a new zoning methodology were considered by Working Group 3:
 - 1. A new Licence Condition could be written into the Transmission Licence similar to that which exists for the Use of System Charging Methodology (Standard Licence Condition C5) and the Connection Charging Methodology (Standard Licence Condition C6).
 - 2. The governance arrangements for the new methodology could sit in the CUSC.
- 5.73 The Working Group considered that the CUSC defines the transmission access product and since zoning is part of the definition of the product, then it would be appropriate to include this as an Annex to the CUSC. Whilst this was the preferred option, the option of a Licence Condition was not ruled out. As Working Group considered the Original zonal methodology could not be practically implemented this issue was not discussed further, or the methodology developed.

Local Only Connections

5.74 The arrangements for local connections were developed by Working Group 3, and the conclusions are described below.

Definition of Local Capacity Nomination

5.75 Working Group 3 proposed that for generators with local only connections, a local access product should be developed. This concept, the Local Capacity Nomination (LCN) would be the maximum capacity (in MW) to which a generator is entitled to obtain transmission access products (long-term and short-term access products and overrun) within a charging year. It was also identified that it must not exceed the Connection Entry Capacity (CEC) of that generator to avoid damage to local transmission assets.

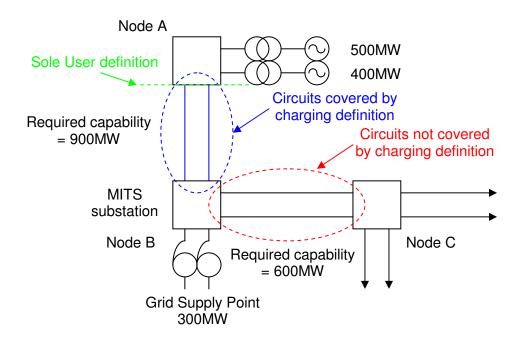
Summary of the properties of Local Capacity Nomination

- 5.76 LCN was determined by Working Group 3 to have the following properties:
 - LCN is the term used by a generator to notify National Grid of its desired maximum local capacity holding in a transmission charging year;
 - LCN represents the physical (and contractual) cap on the total generators' transmission access (MW) derived from a combination of all long and short-term transmission access products, including overrun;
 - LCN will not exceed a generator's CEC;
 - LCN is defined on a Power Station basis (consistent with TEC);
 - LCN will be allocated on a first-come-first-served basis;
 - LCN will be the basis upon which a generators' local asset charge will be calculated and levied;
 - LCN is shareable between generators, when multiple generators agree to share. Any sharing arrangement would be managed with a clause which, in the case of two generators sharing, would restrict one generator if the other generator is using the local connection capacity and vice versa. This approach is similar to that currently adopted to deal with design variation connections.

Enduring arrangements for existing LCN holders

- 5.77 Working Group 3 debated as to whether LCN should be a finite right, linked (or not) to the period of firm transmission capacity obtained in an auction, or evergreen. Given that a generator may not wish to obtain long-term capacity through an auction process, it did not seem appropriate to link LCN to capacity obtained through the auction.
- 5.78 Working Group 3 considered that evergreen rights would be appropriate provided the definition of local assets is generally limited to "sole use" assets; i.e. local assets are not shareable. Where local assets (which are not shared) come to the end of their life, the TO could determine whether they should be replaced following bilateral discussions with the relevant generator. It was noted that the proposed charging definition of local works included shared use assets in some circumstances and some Working Group members believed that it might be appropriate to change the definition of local assets in these circumstances in order to ensure that they are not shared.
- 5.79 The problem with the "sole use" approach to local assets is that it may not in all circumstances be consistent with the principle of ensuring that Users which purchase short-term access products or share, make an appropriate contribution to the cost of the assets that are provided to facilitate their connection. If a "sole use" definition of local assets were to be adopted, then the cost of "spur" circuits to entry points with multiple generators will not be based on LCN (in MW). In the extreme circumstance of a generator choosing a "local only" connection at an entry point at which other generators are connected, that generator would not make any contribution to the cost of the transmission assets required to provide their connection.
- 5.80 This is shown in the below diagram. If a "sole User" definition were to be applied (this is represented by the dotted green line), neither generator would make any contribution to the cost of the spur (shown by the blue lines) required solely to provide their connection.

Potential Definitions of Local Works



- 5.81 The Working Group therefore concluded that local assets should not be limited to "sole use" assets. The Working Group considered that an alternative approach would be to use the definition from the "local generation charging" proposals contained in National Grid's GB ECM-11 Conclusions Report, which is that local circuits are those between an entry point and the next Main Interconnected Transmission System (MITS) substations, where a MITS substation is defined as a Grid Supply Point with more than one circuit connected or a substation with more than four transmission circuits connected. In the diagram above, these local circuits are highlighted in blue.
- 5.82 In this simplified example, the circuits between node A and the next MITS substation (node B) would be defined as "local" under the charging definition. This means that the generators at node A would get access once these circuits had been reinforced to provide a secure capability of 900MW. However, the circuits between node B and node C would not be covered by the charging definition of "local". This would lead to a permanent restriction to the output of the generators unless these circuits were reinforced to provide a secure capability of a secure capability of at least 600MW.
- 5.83 As described in 5.22 above, the Working Group originally considered that different charging and CUSC definitions of "local" works may be required to:
 - Avoid circumstances in which there would be a permanent output restriction on generators being connected; and
 - Protect individual generators from the actions of others or the decisions of the Transmission Owners.
- 5.84 On 10th November, Working Group 3 reviewed the consultation responses, allowing further discussion to be undertaken. The Working Group expressed concerns associated with different charging and CUSC definitions of "local" works. The Working Group noted that if the CUSC definition leads to reinforcement works that go beyond the next MITS substation in order to avoid permanent restrictions, then a User with LCN only will essentially be

getting transmission access without paying the associated cost reflective charge.

- 5.85 Based on this concern, the Working Group agreed that the charging definition for local works should be consistent with the CUSC definition. The Working Group noted that there were scenarios where this definition could lead to a permanent output restriction being placed on a generator and that this would be reflected in bids for short-term access being turned down, restricted sharing exchange rates and high overrun prices. The Working Group also noted that the proposals for node-to-node sharing arrangements would allow generators in this position to apply for node-to-node access rights to facilitate sharing with other generators.
- 5.86 One Working Group Consultation respondent expressed concern that the initial view was to define LCN as a finite right, stating that generally local assets should not be shareable with other generators and that finite right arrangements are only required to redistribute assets that are no longer required by a User but can be used by other generators. During the final Working Group 3 meeting, the majority of Working Group 3 agreed that an enduring right approach was appropriate for sole User assets. National Grid completed some further analysis of the existing system and concluded that, given the relatively shallow nature of local works as defined, there were very few instances in which an enduring LCN right could risk causing inefficient investment of delays to the entry of new power stations.
- 5.87 It was acknowledged that since it is a feasible circumstance that multiple Users may wish to share LCN and the associated local assets, arrangements would be required to facilitate this. Working Group 3 agreed that this could be dealt with by including access restrictions in the generators connection agreement. This is similar to the treatment currently used to deal with connection design variations. The Transmission Owner would build sufficient local assets to cope with the shared holding of LCN only.
- 5.88 Ion summary, it was agreed that a local works definition based on the charging description of a MITS substation used in GB ECM 11 should be adopted. Interpreting this into a definition of works rather than a boundary leads to:

Local works are the **Transmission Reinforcement Works** that are required from the **Connection Site** to connect in to a MITS substation, inclusive of substation works, where a MITS substation is defined as:

- A Grid Supply Point connection with 2 or more Transmission Circuits connecting at the substation; or
- More than 4 **Transmission Circuits** connecting at the substation,

For the purposes of this definition, for an **Embedded Power Station** the **Connection Site** is the associated **Grid Supply Point** as defined in the **Bilateral Agreement**

Application processes

5.89 **New connections:** Existing applications for new generation connections are progressed in line with Section 2.13 of the CUSC: *New Connection Sites, based on the desired CEC and TEC of the applicant.* Following any implementation of one or more of the suite of CUSC Transmission Access Review Amendments (CAPs 161-166), it is foreseeable that a generator may wish to obtain only short-term access products following connection. Given

that a generators LCN will determine the level of obtainable short-term (and long-term) transmission access, and provide the basis upon which the TO decides on an economic level of transmission investment, the concept of LCN needs to be introduced into CUSC Exhibit B: *Connection Application*. A connection application will then be progressed under the same process as any other connection application.

- 5.90 **Existing connections wishing to increase LCN:** Section 6.30.2 of the CUSC: *Increase in Transmission Entry Capacity* defines the process by which generators can currently apply to increase their TEC. Any request from a User to increase its TEC for a connection site up to a maximum of its CEC is deemed to be a modification. This approach also appears appropriate for Users wishing to apply for an increase in LCN. In the event that multiple generators were sharing LCN, the application would have to be made on behalf of all of the generators involved.
- 5.91 **Application fees:** Given the proposed changes to the transmission access regime, it is considered appropriate that the current application fees included in the Statement of Use of System Charges, should be reviewed to differentiate between connection, local, and wider transmission system applications. Fixed and variable application fees will remain in operation. The Working Group noted in particular that generators wishing to increase LCN above their current TEC level during transition should not be exposed to the full Modification Application fee currently associated with changes in TEC.
- 5.92 **Pre-commissioning User commitment:** Working Group 3 identified that there are a number of potential options for arrangements to provide pre-commissioning User commitment:
 - Cost-reflective final sums liabilities (possibly capped at the original offer);
 - A liability based on the relevant Unit Cost Allowance (UCA); or
 - A liability based on a multiple of the local generation TNUoS tariff.
- 5.93 Working Group 3 concluded that the requirement for pre-commissioning security associated with increases in LCN should be consistent with the arrangements proposed for wider long-term transmission access under CAP165.
- 5.94 The CAP165 Original proposal for wider rights is a liability that ramps up over the 4 years prior to completion, to a total of 8 times the wider generation TNUoS tariff. This is reflected in the minimum booking of wider access rights to apply post-commissioning. The 8 years is derived from analysis of TNUoS tariffs against wider UCAs, which shows that, on average, the UCAs are 15 times the TNUoS tariffs. The 15 is halved to reflect a 50/50 risk sharing between generators and consumers. Consistency would imply that the same multiplier could also be used for local connections.
- 5.95 However, there is an additional rationale for 8 years being an appropriate multiplier: If local TNUoS was exactly reflective of capital costs, then a capital payment of 8 x annuitised TNUoS would cover 50% of the capital costs. This is because the TNUoS methodology converts capital sums by assuming a 50 year asset life and a 6.25% rate of return. Annual sums can be converted into a capital sum by multiplying by:

$$(1-(1+0.0625)^{-50})/0.0625 = 15.22$$

5.96 If the 50% risk sharing, consistent with the CAP165 treatment for wider access is applied, the result is a multiplier of 8.

- 5.97 Local TNUoS would not recover all costs, due to Users paying for what they are using rather than what is installed. It therefore would seem appropriate that security is also provided on this basis, and that security should not be provided for TO investments made for wider system reasons.
- 5.98 The Working Group therefore concluded that, consistent with the CAP165 Original treatment for wider access, pre-commissioning User commitment for local commitment should be based on a multiple of 8 years of local generation of TNUoS, profiled 25%/50%/75%/100% over the 4 years prior to completion.
- 5.99 Termination or reduction of the requested LCN would therefore result in the levying of a Local Capacity Reduction Charge, based on Local Cancellation Amounts. The Local Capacity Reduction Charge would be non-refundable.
- 5.100 The Local Cancellation Amount in each year would be a percentage of the Local Termination Amount, which is the higher of zero and eight times the relevant local generation TNUoS charge. The Local Capacity Reduction Charge would therefore be calculated as:

Local Capacity Reduction Charge = LCN_r x LCAM_t

Where:

- *LCN*_r is the reduction in Local Capacity Nomination in kW.
- *LCAM*_t is the relevant Local Cancellation Amount which varies according to the number of full years from the Completion Date:
 - In the year prior to the Completion Date (i.e. t) $LCAM = LTA \times 100\%$), where LTA is the Local Termination Amount;
 - Where t=-1, $LCAM = LTA \times 75\%$;
 - Where t=-2, $LCAM = LTA \times 50\%$; and
 - Where t=-3, $LCAM = LTA \times 25\%$.

Local Termination Amount = $Max (0, (LocGenTNUoS_n x X))$

Where:

- LocGenTNUoS_n is the relevant nodal Local Generation TNUoS tariff applicable to the generation project and published in the Statement of use of System Charges. If such a nodal tariff is not currently published, then the appropriate tariff will be calculated by National Grid as part of the application process, in accordance with the Charging Methodology.
- X is a multiplier, initially taking the value 8, although it may be appropriate that this be amended in subsequent price control periods.
- 5.101 Local Cancellation Amounts will be calculated using the prevailing local Generation TNUoS tariff at the time of Capacity Reduction. Capacity Reduction Charges would not apply to projects where there are no transmission asset works.
- 5.102 **Pre-commissioning security:** The introduction of generic Local Capacity Reduction Charges, defined in the CUSC to replace the existing final sums regime, defined in the bilateral Construction Agreements, will also require the introduction of provisions to define the level of financial security that should be held in relation to these potential liabilities.

- 5.103 It is therefore to add the applicable Local Cancellation Amount to each User's Security Requirement, as defined in paragraph 3.22 of the CUSC. To the extent that these amounts exceed the Allowed Credit extended to each User, Security Cover will need to be provided to National Grid, in any of the forms prescribed in the CUSC.
- 5.104 Working Group 3 noted that alternatives to the CAP165 Original amendment proposal had also been developed by Working Group 2, including cost reflective final sums liabilities. The Working Group noted that should these CAP165 alternative amendments be approved, then they would also amend the pre-commissioning liabilities and security associated with LCN to be cost reflective final sums liabilities.
- 5.105 **Existing connections wishing to decrease LCN:** Section 6.30.1 of the CUSC: *Decrease in Transmission Entry Capacity* defines the process by which generators can currently reduce their TEC. Essentially, a User is entitled to decrease its TEC giving five business days notice in writing, prior to the 30 March in a financial year, with that notified decrease in TEC taking effect on 1 April of that same year. The Working Group also noted the discrepancy between the late March deadline and National Grid's requirement for charge setting data to be provided no later than 23rd December in the previous (charging) year. Had the Working Group decided to pursue an evergreen approach, it would have recommended an alignment of the notification timescales associated with TEC / LCN reduction with the TNUoS charge-setting process.

Transitional arrangements to LCN

- 5.106 Working Group 3 considered three options for transition from the current arrangements to those which require a Local Capacity Nomination.
 - <u>LCN based on a generator's CEC</u>
 Given that CEC is not currently linked to transmission access allocation, this option seems the least appropriate.
 - <u>LCN based on a generator's TEC</u> Given that the suite of CUSC Transmission Access Review Amendments (namely CAPs 161, 162, 163, 164, 165 and 166) are potentially introducing some fundamental changes to the way in which transmission access is allocated, existing TEC may not be considered appropriate for some generators.
 - <u>Generators would notify National Grid of its desired LCN in advance of a</u>
 <u>pre-defined date</u>

Working Group 3 concluded that this option appeared to be the most practical solution, although it was noted that the value notified will be limited to a generators CEC. In the event that a generator did not notify National Grid of its desired LCN, the use of TEC as a default value seemed appropriate. In the instance that multiple generators wish to share an LCN, a process for request will be required. Timescales for a generator to notify National Grid of its desired LCN value will be very much dependent on the transmission access products implemented.

6.0 WORKING GROUP ALTERNATIVE AMENDMENT

6.1 The Original amendment stated that overrun would be on a zonal access product. Working Group 3 has developed a nodal model as an alternative to a zonal model. Working Group 1 discussed the implications for this on the principle of overrun under the CUSC and the 3 options for charging.

- 6.2 Some members of the Working Group considered that a nodal model would be an improvement over a zonal model. This could facilitate more accurate charging thus be more cost reflective. Working Group 1 agreed that whilst there were advantages to a zonal model in principle, the analysis in Working Group 3 had reasonably demonstrated that a 1:1 sharing arrangement would not be practicable.
- 6.3 Working Group 1 agreed that the overall benefits for nodal overrun were similar to those for zonal, but it avoided the critical downside risks, and so agreed a nodal model should be taken forward as a Working Group Alternative Amendment. The detailed implications for charging are discussed in the Charging pre consultation; National Grid saw no obstacles to introducing any of the proposed changing methodologies on a nodal basis.
- 6.4 In terms of process the main difference between the nodal and zonal models is how the overrun volume is determined. In the Original amendment under a zonal model a Companies total access holding in a zonal would netted against the total metered volume in the same zone. Under the nodal proposal overrun volume would be determined at a nodal level (i.e. per Power Station, the same as TEC currently). The access holding at a Power Station would be netted against the metered volume to establish the nodal overrun volume. For avoidance of doubt, as with TEC and TNUoS, this would still permit zonal Overrun tariffs. The Working Group agreed that the zoning methodology for Overrun should be part of the charging methodologies.
- 6.5 In summary the Working Group agreed one alternative, WGAA, which is implementation of overrun with rights defined and settlement based on a Power Station level (as TEC is currently defined) albeit with a tariff may be zonal, subject to charging methodologies.

7.0 ASSESSMENT AGAINST APPLICABLE CUSC OBJECTIVES

This section includes the Working Group initial views, following consultation the Working Group will consolidate these with industry view for presentation to the CUSC Panel. Accordingly, views for an against are presented to ensure respondents are aware of all Working Group views.

Proposed Amendment

- 7.1 The Working Group considered the CAP162 Original against the CUSC Objective(s);
 - (a) the efficient discharge by the Licensee of the obligations imposed upon it by the act and the Transmission Licence;

In principle CAP162 Original would permit greater use of the GB transmission system, however the concept of zones could not be efficiently integrated within the framework without the risk of significant costs, and therefore a zonal model did not better facilitate the CUSC applicable objective (a).

Some members of the Working Group believed that the Original concept of overrun on a zonal basis provided the benefits discussed for the WGAA (section 7.2 a below) and that these overall outweighed the risk of increased costs.

(b) facilitating effective competition in generation and supply of electricity and facilitating such competition in the sale, distribution and purchase of electricity.

CAP162 Original would facilitate more plant accessing the market which would have an beneficial impact on competition in the energy market, however the implication of 1:1 sharing on investment and operational costs would be borne by all Users. Therefore CAP162 Original would not better facilitate CUSC applicable objective (b). operational costs would be borne by all Users. Therefore CAP162 Original would not better facilitate CUSC applicable objective (b).

Some members of the Working Group believed that the Original concept of overrun on a zonal basis provided the benefits discussed for the WGAA (section 7.2 b below) and that these overall outweighed the risk of increased costs.

- 7.2 The Working Group considered the CAP162 Working Group Alternative Amendment (nodal) ('the WGAA') against the CUSC Objective(s);
 - (a) the efficient discharge by the Licensee of the obligations imposed upon it by the act and the Transmission Licence;

The majority of working group members believed that the WGAA:

- i. should allow Users to optimise the use of the GB transmission system but only when used in addition to acquiring or committing to acquire long-term access so that the charging system overall retains long term cost-reflectivity.
- ii. would facilitate access sharing and remove the possibility of a CUSC breach.
- iii. would be available to all generator types and so is not discriminatory as long as it priced in such a way as to reflect any additional costs caused by overrunning and not encourage "freeriding". All Users will contribute to the residual element of cost recovery.

Some Working Group members:

- iv. suggested that that linkage to more efficient long term access was overstated and was not relevant once an investment had been made, although recognised there was a longer term SQSS issue to ensure appropriate investment signals,
- v. believe that overrun will only encourage efficient investment if the additional local short-term (constraint) costs are reflected in Overrun prices and hence give appropriate long-term investment signals,
- vi. thought that overrun could be seen as making more efficient use of existing assets.
- (b) facilitating effective competition in generation and supply of electricity and facilitating such competition in the sale, distribution and purchase of electricity.

The majority of working group members believed that the WGAA:

- i. would allow more generation to connect to the GB transmission system and hence increase competition, although this volume may be limited (as a facilitator, in combination with other proposals would have a greater impact).
 - ii. flexibility of the product provided to Users will allow more parties to compete effectively.

Some members suggested that:

- iii. the complexities and lack of transparency associated with this proposal will discourage investment in new generation and lead to increased risk premiums which will not facilitate competition
- iv. whilst overrun prices need to reflect any additional constraint costs it was also important that Users have a reasonable idea of what these additional costs might be before they decide to overrun in any particular period. These Working Group members felt that the Simple overrun pricing option may provide the most appropriate balance between these competing requirements.
- 7.3 The Working Group noted that facilitating competition depended strongly on the interaction with charging methodologies (of which the relevant objective also include facilitating competition). In particular, the cost reflectivity of the Overrun tariff and that all Users contribute fairly to the 'residual'.

8.0 IMPACT ON NATIONAL GRID IS SYSTEMS AND RESOURCES

- 8.1 The conclusions of National Grid's initial IS impact assessment for the Original Amendment and the Working Group Alternative Amendment are summarised below. These conclusions are <u>indicative</u> only and are subject to change following further analysis.
- 8.2 Costs are identified as falling into one of three broad categories (less than £500k, £500k to £1m, and £1m to £5m). Timescales are indicated by stating whether or not the necessary systems can be delivered in time (for an assumed "first run" date) given various starting dates for the projects to deliver the systems. This approach has been followed for all of the CAPs in the TAR suite in order to provide consistency.
- 8.3 During the Working Group discussions it was noted that the choice of charging methodology is the key factor in determining the complexity and reliability of the systems required to support the implementation of CAP162. For this reason the impacts of the different charging methodologies have also been considered below. The Cost Recovery charging methodology is divided into two options, one in which the current system for degutting operational costs (BAAR) is used as is, and one in which it is modified.
- 8.4 It has been assumed that the use of overrun will be low enough that some parts of the solution could be manual processes. In particular, it should be noted that:
 - 1. Credit checking would be a manual process.
 - 2. Some elements of the settlement process might require manual processes.

	Assumed date of decision by the Authority	First run	Months available if work begun after the Authority decision	Months available if work begun in Dec-08	Deliverable if work begun after Authority decision?	Deliverable if work begun in Dec-08?	<£500k	£500k - £1m	£1m - £5m
Original Zonal Simple	Jun-09	Apr-10	10	16	NO	YES		•	
Original Zonal Cost Recovery (BAAR as is)	Jun-09	Apr-10	10	16	NO	YES		٠	
Original Zonal Cost Recovery (BAAR modified)	Jun-09	Apr-10	10	16	NO	NO		•	
Original Zonal Marginal	Jun-09	Apr-10	10	16	NO	NO			•
WGAA Power station Simple	Jun-09	Apr-10	10	16	NO	YES		•	
WGAA Power station (BAAR as is)	Jun-09	Apr-10	10	16	NO	YES		•	
WGAA Power station (BAAR modified)	Jun-09	Apr-10	10	16	NO	NO		•	
WGAA Power station Marginal	Jun-09	Apr-10	10	16	NO	NO			•

Where the above table indicates that if work starts in December 2008 it is feasible to deliver the necessary systems in time for the stated first run date, it may be assumed that any delay to the start of work would lead to an equivalent slip in the first run date.

- 8.5 The conclusions above could be affected by the content of the open letter on the related charging arrangements which National Grid intends to publish during the Company consultation period.
- 8.6 There are many limitations on the scope of this initial IS impact assessment. Examples include:
 - 1. Only the impact on National Grid's IS systems has been assessed. The impact on CUSC parties' IS systems has not been assessed.
 - 2. Only the costs of the projects required to deliver the necessary systems have been estimated. Additional run-the-business costs relating to IS systems are likely to be incurred, these have not been estimated.
 - 3. There has been no analysis of any IS effort or systems required during the transition from the existing arrangement to the new arrangements.
 - 4. Each CAP and each option associated with it has been assessed in isolation. The impact on time and cost of multiple projects running in parallel has been ignored.
 - 5. National Grid has not assessed the work against its existing IS workload to assess resource availability.
- 8.7 A more accurate IS impact assessment for the Original Amendment and the Working Group Alternative Amendment would require a number of items which are not currently available. These include:
 - 1. Definition of the business requirements for the Original Amendment and the Working Group Alternative Amendment in more detail than has been discussed by the Working Groups.
 - 2. Confirmation of certain technical assumptions which have been made during the initial analysis.

- 3. Identification of the combination of CAPs 161-166 that is to be implemented and for each CAP that is to be implemented whether the Original Amendment or one of the Working Group Alternative Amendments is to be implemented.
- 8.8 Without prejudicing the decision of the Authority, National Grid intends to undertake further analysis between November 2008 and March 2009. This analysis will attempt to address point 1 above by making assumptions about the most likely detailed business requirements and will attempt to address point 2 by undertaking a number of feasibility studies. To address point 3 the analysis will consider the consequences a variety of possible combinations. The results of the analysis will be made available to CUSC parties and the Authority.
- 8.9 National Grid has also estimated the ongoing resource requirement for Settlement and monitoring on an enduring basis for the low scenario as 1 Full Time Equivalent. This does not cover set up and testing of processes and systems. Implemented along with other transmission access proposals this resource may be partly shared due to the overlap in resources.
- 8.10 These resource estimates do not include those required for producing tariffs. This is to avoid double counting with consequential charging proposals.

9.0 PROPOSED IMPLEMENTATION AND TRANSITION

- 9.1 National Grid is particularly interested in industry views on the proposed implementation issues and timescales proposed below.
- 9.2 Assumptions:
 - 1. Local charging GB ECM 11 is implemented in April 2009, or if vetoed other local charging arrangements are in place on or before CAP162 Original or WGAA implementation.
 - 2. Residual charging cannot be implemented until April 2010. The critical path is charging process, including the probable need for an impact assessment. Early implementation could be possible, and there are a number of options. These would have significant implications for revenue recovery and charging process and methodology.
 - 3. Overrun requires daily settlement. The earliest date by which IS systems for daily settlement could be delivered is April 2010.
- For both CAP162 Original and the WGGA, National Grid proposes that 9.3 implementation should be 1st April 2010, subject to receiving an Authority decision by 30th June 2009, and IS changes proceeding before that as discussed below, and the charging model chosen. If this decision date is not met then the implementation date will be delayed by the same length of time. A decision beyond this time would also have consequences for charging, tariff setting and accurate revenue recovery. Respondents to the Working consultation who supported SO Release supported Group the implementation date.
- 9.4 The Working Group acknowledged the implication of National Grid IS developments discussed in section 8 above. If National Grid IS work does not proceeded as discussed in section 8 the implementation date would need to be delayed beyond April 2010.

- 9.5 The Working Group discussed mid year implementation. The charging amendments prevent implementation prior to April 2010. After this time, once the charging arrangements are in place mid year implementation could be accommodated, although it is likely to affect the accuracy of revenue recovery.
- 9.6 Implementation timescales will be most affected by the IS requirements for the charging changes. The above timescales would only be practicable for the Simple and Cost Recovery methodologies. Implementation of the Cost Recovery methodology in these timescales assumes that it is largely based on existing systems i.e. if changes to the existing functionality are required or if a more robust system is required implementation could not be April 2010. The Marginal methodology algorithm would require a much longer lead time that could only be robustly established after a much more detailed IS impact study, which itself would take several months.
- 9.7 In order to implement daily settlement in April 2010 Ofgem would need to permit development of IS systems prior to an Authority decision being made. National Grid clarified to the Working Group that any IS works undertaken prior to a decision were intended to implement the proposal in the report, not further develop the proposal. It was agreed that any further 'developments' or changes to the amendment would require a further amendment.
- 9.8 In the case of Cost Recovery and Marginal methodologies it was recognised that the Industry would benefit from seeing the successful model running for a period prior to implementation.
- 9.9 There is a risk associated with the lack of time to test and trial any systems prior to implementation. The Working Group discussed the appropriate governance around the testing and trialling of the systems. The industry needs to have confidence before Go Live that the system is giving accurate results (where "accurate" means "in line with the rules agreed in advance by the industry"). Beyond this industry testing period there would also be a market trialling period where participants gain confidence that the tariffs produced are acceptable. Adding this industry testing and market trialling period on to the design and build period would make implementation extreme unlikely for April 2010 for a Cost Recovery system and unachievable for fully functional Marginal systems. Taking into account the time required for industry testing and market trialling the Working Group believes that there should be a six month lead time from the tariff model being available to implementation.
- 9.10 Implementation of the Original or any WGAAs will require changes to bilateral agreements, most significantly the Bilateral Agreements, Bilateral Embedded Generation Agreements and the Construction Agreements. The main change is associated with implementing LCN in existing bilateral agreements where this is not set at current TEC, and amending Construction Agreements for future connectees to separate local and wider works to facilitate earlier connection dates. It is estimated that this will take 6 months. Therefore an Authority decision would be required no later than September 2009 to implement by April 2010 in relation to LCN only.
- 9.11 Working Groups 1 and 3 discussed the transition and enduring arrangements for LCN. Working Group 1 discussed that if during the transition a generator requested an LCN higher than existing TEC (up to a maximum CEC) then there should be a charge to assess this request, if additional works are

required this would be treated as a modification application. The charging statement would need to be updated to reflect this; however this is consistent with the existing changing methodology.

10.0 IMPACT ON THE CUSC

- 10.1 CAP162 will mainly impact on sections 2 and 3 of the CUSC in relation to the obligations on Users and National Grid with respect to the rights and obligations associated with export on to the transmission system.
- 10.2 There will also be changes to accommodate new forms to facilitate Local connection, and a number of credit and security changes associated with the revised connection arrangements and Overrun payment itself.
- 10.3 The Working Group agreed that LCN should be added to the TEC register. The transition arrangements for LCN have been discussed in section 5.
- Implementation of local connection arrangements in the CUSC along with 10.4 LCN is expected to have an impact on Bilateral Connection Agreements, Bilateral Embedded Generation Agreements. It is envisage that it will only directly affect those parties who wish a different LCN to existing contracted TEC, and this can not be accommodated without additional reinforcement works. Parties who wish apply for LCN greater than existing TEC, or to bring forward connection dates in light of CAP162, would apply through a Modification Application in transition, so the bilateral agreements are not considered as being directly changed by CAP162 implementation. It was discussed that if there were no work required to accommodate the Modification Applications made during transition then the fee should not be a full modification application fee. National Grid indicated that within the charging methodology application fees were required to be cost reflective, so National Grid would consider introducing a new fee for Transitional Modifications that resulted in no works (an assessment fee), or submitted on the basis of no works required (i.e. if works were required the offer would be no additional capacity). This will impact on all transmission licensees charging statements.
- 10.5 The text required to give effect to the WGAA has been developed by National Grid and discussed with the Working Group. In accordance with CUSC 8.19.5 National Grid has agreed that legal drafting for the Original is not submitted in this report.

11.0 IMPACT ON INDUSTRY DOCUMENTS

Impact on Core Industry Documents

- 11.1 Grid Code: There may be some new data obligations required, yet to be identified, along with some definitional changes. There may also need to be some house keeping changes to the data validation rules that are referenced by issue number in the Grid Code. There may be similar consequential changes as to when TEC and CEC were introduced under CAP043 in the Planning Code, in relation to Committed Planning Data.
- 11.2 These issues are being discussed by the Grid Code Review Panel. National Grid expects to bring forward any proposed changes in early 2009 through the Grid Code governance framework and have not identified any changes that are required for implementation of CAP162.

- 11.1 The Working Group discussed the interaction with the obligation in the Balancing Codes on a number of occasions. The conclusion was that parties who Overrun will still be subject to all of the requirements in the Balancing Code, in particular to provide accurate Physical Notifications.
- 11.2 STC: This amendment will require new process and obligations in the STC framework to cater for the proposed local only application and LCN concept. The STC Committee are also considering transitional implications associated with this proposed amendment i.e. facilitating the earlier connection of existing contracted parties. National Grid expects the STC Committee to will bring forward any required changes through STC governance framework in early 2009.
- 11.3 BSC: None envisaged by the Working Group.

Impact on other Industry Documents

- 11.4 GB SQSS: Overrunning could lead to a non-compliant system and may require derogations to the GB SQSS. SQSS is being reviewed to establish impacts, not expected to delay implementation. If GB SQSS changes are not implemented prior to implementation transmission licensees may need to consider a transitional period with derogations from the GB SQSS.
- 11.5 The Working Group expects that the review of the GB SQSS will establish the process for facilitating local connections and interpretation of any changes to the signals derived from CUSC access products.
- 11.6 Charging methodologies: The proposals have a number of implications on charging arrangements which have been mentioned in this report. Changes are being discussed through the charging methodologies governance arrangements. Implementation timescales are highlighted under section 8. A number of developments, GB ECM11 (local charging), GB ECM13 (residual charging) and GB ECM14, has been already been taken forward.
- 11.3 Transmission Licence: Within this report the possible implications on revenue flows and incentives has been identified. These are mainly transmission licence issues rather CUSC. National Grid is reviewing the possible implications for the transmission licence and will contact Ofgem directly to discuss these and agreeing an appropriate way of taking any changes forward, particular with respect to facilitating short term revenue flows through Balancing Services Use of System charges. National Grid expects that SO incentives would be taken forward as part of BSIS scheme developments, TO incentives would need to be discussed separately. These arrangements could be implemented by April 2010 providing initial discussion and development is not delayed until the final decision.

12.0 WORKING GROUP RECOMMENDATION

12.1 The Working Group believes its Terms of Reference have been completed and CAP162 has been fully considered. At the final meeting on 18 November 2008 fifteen Working Group members cast votes:

Voting Results	For	Against	Abstain
Original better than Baseline	2	10	3
WGAA better than Baseline	15	0	0

12.2 The Working Group also voted on which of the Original or the WGAA better meets the CUSC applicable objectives:

Voting Results	For
Original best	0
WGAA1 best	15

13.0 AMENDMENTS PANEL RECOMMENDATION

- 13.1 The Panel agreed that the Working Group had fulfilled its Terms of Reference. A number of Panel members stated that the report was as complete as possible given the time constraints associated with the wider Transmission Access Review.
- 13.2 At the Panel meeting on the 19 December 2008 the Panel vote as follows:

Voting Results	For	Against	Abstain
Original better than Baseline	0	8	0
WGAA better than Baseline	8	0	0

13.3 The Amendment Panel also voted on which of the Original or the WGAA better meets the CUSC applicable objectives:

Voting Results	For
Original best	0
WGAA best	8

13.4 A number of Panel Members expressed concerns about the process that had been followed for the suite of modifications related to the transmission access review. The Panel agreed that a discussion covering these concerns along with lessons learned and consideration of how the conclusions are best communicated to the wider industry will take place at the Panel meeting in February. This will align with the completion of CAP166 and consideration of the interaction between modifications and the associated changes to the Charging Methodologies. The conclusions of this discussion will be forwarded to Ofgem such that they can feed into their assessment of the modifications, and potentially their wider work on Codes Governance.

14.0 NATIONAL GRID RECOMMENDATION

- 14.1 National Grid does not support implementation of the CAP162 Original proposal due to the issues associated with zonal definition of access rights identified during the Working Group assessment.
- 14.2 The analysis work performed by National Grid demonstrates that the risk of increased socialised constraint costs is unacceptable and would not better facilitate the efficient discharge by the Licensee of the obligations imposed upon it by the Act and the Transmission Licence, particularly the requirement to be economic and efficient. In addition, the Original proposal would not better facilitate competition since it would expose Users to significant socialised costs which they would not be in a position to control.
- 14.3 National Grid does support the implementation of the Working Group Alternative Amendment that retains the nodal definition of access. This proposal introduces arrangements that, whilst not as flexible for Users as those initially proposed, do provide practical means to exceed booked

transmission access rights without the associated increase in socialised constraint costs.

14.4 The Working Group Alternative Amendment better facilitates the efficient discharge by the Licensee of the obligations imposed upon it by the Act and the Transmission Licence by allowing Users at power stations with different operating regimes to exceed booked capacity when, in their view, it is economic to do so. These Users will only apply for additional long term access rights if overrun is not economic, and this would improve the signals provided to National Grid to invest in the transmission system leading to the development of a more economic and efficient transmission system. The Working Group Alternative Amendment better facilitates competition by providing alternative transmission access options for all Users, and by potentially freeing long-term access rights for use by others if existing Users choose to overrun, for all or a portion of their capability, and therefore optimise their long-term access rights holdings.

15.0 INDUSTRY VIEWS AND REPRESENTATIONS

15.1 Responses to the Working Group Consultation

15.1.1 The following table provides an overview of the representations received. Copies of the representations are contained in the Amendment Report Volume 2.

Reference	Company	Supportive
CAP162-WGC-01	Scottish Renewables	Yes
CAP162-WGC-02	Scottish Power	Yes
CAP162-WGC-03	Wind Energy	Not expressed
CAP162-WGC-04	Welsh Power	Not expressed
CAP162-WGC-05	Scottish and Southern Energy	Broadly
CAP162-WGC-06	Gas de France ESS (UK) Itd	Yes
CAP162-WGC-07	International Power	Yes
CAP162-WGC-08	E.ON UK	Yes
CAP162-WGC-09	EDF Energy	No
CAP162-WGC-10	DONG Walney	Not expressed
CAP162-WGC-12	Centrica	Yes
CAP162-WGC-13	BWEA	Supportive of concept
CAP162-WGC-14	British Energy	Yes
CAP162-WGC-15	Renewable Energy Association	Yes
CAP162-WGC-16	Nuclear Decommissioning Authority	Yes
CAP162-WGC-17	ESB International	Yes
CAP162-WGC-18	RWE	Yes
CAP162-WGC-19	Immingham CHP	Yes
CAP162-WGC-21	Drax Power	No in principle
CAP162-WGC-22	AEP	Yes

15.1.2 The following table provides an overview of the Working Group Consultation Requests received. Copies of the representations are contained in Amendment Report Volume 2.

Reference	Company	Details of the proposal	Working Group Comments
CAP162-WGCR- 01	EDF energy	Simple tariff based on BSUoS. Proposal removes link to imbalance pricing	The working group agreed not to take forward as a WGAA on the basis that it was a charging issue. National Grid agreed that it could be considered along with responses to charging pre consultation GB- ECM14.

15.2 Views of Core Industry Document Owners

15.2.1 National Grid has been in contact with the directly affected code owners discussed in this report. The most significant of theses is the STC. A representative of the STC attended the Working Group as an observer and the STCC are progressing the necessary changes. Other code Panels received the consultations and have made no representations.

15.3 Company Consultation

15.3.1 The following table provides an overview of the representations received. Copies of the representations are contained in Amendment Report Volume 2.

Reference	Company	Comments
CAP162-CR-01	AEP	Concern about the timescales and the cost benefit analysis. General support that it should, in theory, enable connection of additional generation. Support for a nodal and not a zonal approach. General member support for the WGAA.
CAP162-CR-02	British Energy	Support the implementation of the WGAA. Usage should be monitored so improvements can be made through the CUSC amendment process. CAP162 should be a priority for implementation. Support implementation of the discussed Simple methodology, not the marginal methodology.
CAP162-CR-03	Centrica Energy	Concern over the assessment process, timescales, interaction of proposals and general depth of analysis. Short term products are not bankable so are limited use to developers. Implications cannot be fully assessed until charging changes are fully developed.
CAP162-CR-04	Drax Power Limited	Targeting of costs limits the burden of socialisation but limits the practicality of the product. Short term products lack the certainty required by investors. CAPs 161, 162 and 163 do not provide adequate solutions to providing early connection.

CAP162-CR-05	E.ON UK plc	Support the introduction of an overrun product but charging arrangements are crucial. Overrun is a facilitating rather than a primary access product, developers unlikely to commit based on overrun alone. Prefer a simple charging methodology. Support the view of the Working Group regarding implementation.
CAP162-CR-06	International Power First Hydro	Carry forward comments from response to the Working Group consultation. Reiterate support for the Simple methodology.
CAP162-CR-07	Immingham CHP LLP	Views unchanged from the Working Group consultation response. It is essential that existing rights are respected. The process for such a profound change is inadequate, necessitating the need for a full Impact Assessment to be carried out. Support the principle of overrun providing that existing user's rights are unaffected.
CAP162-CR-08	REA	View unchanged from the Working Group consultation. Supportive of the principle of overrun. Overrun facilitates other products and provides contestability. Do not favour a marginal methodology. The main objective of pricing should be to leave other users whole rather than provide signals. Support the WGAA.
CAP162-CR-09	Rio Tinto Alcan	Concerned that the proposals may affect their property rights. Unique nature of operations justifies different treatment.
CAP162-CR-10	Scottish and Southern Energy	Support for WGAA1. Concerned about the ability to model the financial aspects making it difficult to assess. Comments made to Working Group consultation stand. Lament over the level of analysis on usage, which would support a cost benefit analysis and better enable full assessment, also that Post Implementation Evaluation has not been sets out. Concern about the provisions of investment signals. Concerned about the potential perverse outcome due to the treatment of negative zones and the Working Groups assessment in this area. Concern that permitting implementation expenditure prior to a decision is 'tantamount to fettering the Authority's discretion'.
CAP162-CR-11	Scottish Power	Supports WGAA. Would have preferred a zonal approach, a nodal approach may limit usage. Overrun alone does not provide bankability. The risk associated with ex post pricing will limit take up, particularly in Scotland where the incidence of constraints is high.
CAP162-CR-12	Welsh Power	There are potential benefits to CAP162, providing access to the system whilst not increasing costs borne by others. Support the nodal approach.

15.4 Comments on the Draft Amendment Report

15.4.1 Some minor non material comments were received, the supporting comment in Panel Recommendation was updated with the comments received.

ANNEX 1 – PROPOSED LEGAL TEXT TO MODIFY THE CUSC

Text to give effect to the Working Group Alternative Amendment

CAP 162 (Entry Overrun): Summary Sheet of Proposed Amendments

1. Overview of Changes

- 1.1 The changes in the legal drafting that are being proposed to implement CAP 162 essentially consist in introducing the concept of Local Capacity Nomination ("LCN") (which is common to CAP 161-163, 165 and 166) and Entry Overrun (i.e. use of system above a User's Access Capacity) in the following sections of the CUSC (in particular Section 3 and Appendix 3 to Section 3). The changes that are being proposed to implement the LCN proposals are highlighted in turquoise and Entry Overrun proposals are highlighted in yellow in the relevant attachment to this report and are shown change marked\highlighted where they are alterations to exiting text.
- 1.2 In summary the drafting consists of changes to;
 - 1. CUSC Section 2 (by summary)
 - 2. CUSC Section 3 (by red line against existing sec)
 - 3. CUSC Section 3, Appendix 3 (which is a new appendix)
 - 4. CUSC Section 6 (by summary)
 - 5. CUSC Section 9 (by summary)
 - 6. CUSC Section 10 (transitional provisions to effectively deal with the "creation" of LCN)
 - 7. CUSC Section 11 (by summary)
 - 8. Schedule 2 Exhibit 1 (BCA) by redline
 - 9. Schedule 2 Exhibit 2 (BEGA) by redline
 - 10. Exhibit B (BCA Application) by redline
 - 11. Exhibit C (BCA Offer) by redline
 - 12. Exhibit D (BEGA Application) by redline
 - 13. Exhibit E (BEGA Offer) by redline
 - 14. Exhibit XA (Shared Access Capacity Rate Request Form) (Cap 163 only)
- 1.3 If the CAP 162 proposal is not approved, but the other modifications are, the sections dealing with Entry Overrun will be replaced with the words "Not Used" and the numbering in the attached sections of the CUSC will remain unaffected.

- 1.4 The sections of the CUSC attached to this report, in particular section 3 and Appendix 3 to Section 3, show the combination of the proposed changes to implement the proposals of CAP 161 to 163. Therefore, when reading the attachments to this report from a CAP162 perspective, you should ignore the proposed changes that are highlighted in, light green (proposed changes for short term products for CAP 161) and light grey (proposed changes for CAP163).
- 1.5 Should the proposals for CAP 161 (LCN/Short Term Products) and/or CAP 163 (TEC Sharing) not be approved, the proposed provisions for CAP 161 and/or CAP 163 shall be replaced with the words "Not Used" and the numbering in the attached sections of the CUSC will remain unaffected.

Proposed Amendments to CUSC Section 2 under CAP 161 (LCN and Short Term Access Products), 162 (Entry Overrun) and 163 (TEC Sharing)

Please note that the numbering of the respective paragraphs is given in the heading above each section of text (rather than given next to the paragraph text).

Old paragraph 2.3(Export of Power from Connection Site)

This paragraph has been deleted and an updated version of this paragraph has been moved to CUSC Section 3, which deals with use of system issues, Paragraph 3.2.2

Old paragraph 2.4, now 2.3 (Import of Power to Connection Site)

<u>1.1</u> <u>1.4</u> IMPORT OF POWER TO CONNECTION SITE</u>

Subject to the other provisions of the **CUSC** and in particular Paragraph 2.2.2(b), the relevant **Bilateral Connection** Agreement and the **Grid Code**, **The Company** shall, as between **The Company** and that **Usera User acting in the category of a Non-Embedded Customer or a Public Distribution System Operator**, transport a supply of power to each **Connection Site** of a **User** through the **GB Transmission System** up to the **Connection Site Demand Capability** except to the extent (if any) that **The Company** is prevented from doing so by transmission constraints or by insufficiency of generation which, in either case, could not have been avoided by the exercise of **Good Industry Practice** by **The Company**.

General - Renumbering

Please note that as a result of the proposed amendments, the clause numbering has been changed in some instances (as identified in the paragraph headings, above). This has meant that cross-references throughout the document have changed, those changes have not been shown here, unless they appear in paragraphs with more substantial amendments.

CUSC - SECTION 3

USE OF SYSTEM

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CUSC - SECTION 3

USE OF SYSTEM

1. hidden

2. hidden

3. hidden INTRODUCTION

3.1.1 This Section 3 deals with use of the **GB Transmission System** and certain related issues. Part I of this Section sets out general provisions (split into Parts A and B dealing with generation and supply), Part II sets out charging related provisions and Part III sets out the credit requirements related to **Use of System**. Depending on the category of connection and/or use of a **User**, the Section dealing with **Connection** (Section 2) may also be applicable.

3.1.2 <u>A User's Use of System may occur in one of the ways</u> specified in Appendix 3 to Section 3 of the CUSC.

PART IA - GENERAL - GENERATION

This Part IA deals with <u>Use of System</u> rights and obligations relating to <u>Power</u> <u>Stations directly Connected to the GB Transmission System</u>, Embedded Power Stations, Small Power Station Trading Parties and to Distribution Interconnectors. References to "User" in this Part IA should be construed accordingly.

3.2 <u>1.2</u>RIGHTS TO USE THE GB TRANSMISSION SYSTEM

3.2.1 1.2.1 Embedded Use of System

Subject to the other provisions of the CUSC, the Grid Code and the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement, and, for Users other than Power Stations directly connected to the GB Transmission System, subject to there continuing to be a Distribution Agreement with the owner/operator of the Distribution System, each User, as between The Company and that User, may in relation to each of its Embedded generation sitesNode **Distribution** and each of its **Interconnectors** transmit (or put, as the case may be) supplies of power on to and/or take supplies of power from the GB Transmission System as the case may be.

- 3.2.2 Subject to the other provisions of the CUSC, the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement and the Grid Code, The Company shall, as between The Company and that User, accept into the GB Transmission System at the specified Node power generated by such User up to that User's LCN as set out in Appendix C of the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement except to the extent (if any) that The Company is prevented from doing so by transmission constraints which could not be avoided by the exercise of Good Industry Practice by The Company.
- 3.2.3 Other than as provided in Paragraph 3.2.4, and subject to the other provisions of the CUSC, the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement and the Grid Code, each User, as between The Company and that User, shall not, operate its User's Equipment such that it exports on to the GB Transmission System power generated by such User in excess of its LCN as set out in Appendix C of the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement save as expressly permitted or instructed pursuant to an Emergency Instruction under the Grid Code or save as expressly permitted or instructed pursuant to the Fuel Security Code or as may be necessary or expedient in accordance with Good Industry Practice.
- 3.2.4 Each User in respect of an Embedded Small Power Station and a Distribution Interconnector and as a Trading Party responsible for Embedded Small Power Stations, as between The Company and that User, shall not operate its User's Equipment or equipment for which the User is responsible (as defined in Section K of the Balancing and Settlement Code) such that its export of power onto the GB Transmission System exceeds the LCN set out in Appendix C to the relevant Bilateral Embedded Generation Agreement save as expressly permitted and instructed pursuant to the Fuel Security Code or as may be necessary or expedient in accordance with Good Industry Practice.

Import of Power

3.2.5 Subject to the other provisions of the CUSC the relevant Bilateral Connection Agreement and the Grid Code, The Company shall, as between The Company and a User acting in the category of a Power Station directly connected to the GB Transmission System, transport a supply of power to each Connection Site of such a User through the GB Transmission System up to the Connection Site Demand Capability except to the extent (if any) that The Company is prevented from doing so by transmission constraints or by insufficiency of generation which, in either case, could not have been avoided by the exercise of Good Industry Practice by The Company.

3.2.6 <u>1.2.2 Embedded Power Station and Distribution Interconnector</u> Conditions

- (a) The rights and obligations of a **User**, and **The Company** in connection therewith, are subject to the following conditions precedent having been fulfilled before such rights and obligations arise:
 - (i) the User having provided (in a form reasonably satisfactory to The Company) proof of having entered into a Distribution Agreement with the owner/operator of the Distribution System; and
 - (ii) in the case of an Embedded Small Power Station The Company having received satisfactory confirmation from the owner/operator of the Distribution System as to the running arrangements within the Distribution System;
 - (iii) in the case of an Embedded Small, Medium and Large Power Station, in relation to a Small Power Station Trading Party and in the case of a Distribution Interconnector, of the acceptance by the owner/operator of the **Distribution System** of any relevant Modification Offer necessary to the Embedded Station Distribution Power or **Interconnector** (as the case may be):
- (b) If the conditions precedent of 3.2.23.2.6(a)(i) to (iii) have not been fulfilled in the case of 3.2.23.2.6(a)(i) and 3.2.23.2.6(a)(ii) within 6 months of the date of the relevant Bilateral Embedded Generation Agreement or in the case of 3.2.23.2.6(a)(iii) within 3 months of the date of receipt by the owner/operator of the Distribution System of the Modification Offer The Company or the relevant User may rescind the relevant Bilateral Embedded Generation Agreement and any associated Construction Agreement by giving to the other notice to that effect in which event all rights and liabilities of the parties thereunder and under the CUSC in relation to relevant Embedded Power Stations or relevant Distribution Interconnectors shall cease.

1.2.3 Transmission Entry Capacity

⁽a) Other than as provided in Paragraph 3.2.3(b), each User, as between The Company and that User, shall not operate

its User's Equipment such that its export of power onto the GB Transmission System exceeds the Transmission Entry Capacity and (if any) STTEC and\or LDTEC and\or any Temporary Received TEC less any Temporary Donated TEC for the relevant Period set out in Appendix C to the relevant Bilateral Embedded Generation Agreement save as expressly permitted and instructed pursuant to an Emergency Instruction under the Grid Code or save as expressly permitted and instructed pursuant to the Fuel Security Code or as may be necessary or expedient in accordance with Good Industry Practice.

- (b) Each User in respect of an Embedded Small Power Station and a Distribution Interconnector and as a Trading Party responsible for Embedded Small Power Stations, as between The Company and that User, shall not operate its User's Equipment or equipment for which the User is responsible (as defined in Section K of the Balancing and Settlement Code) such that its export of power onto the GB Transmission System exceeds the Transmission Entry Capacity and (if any) STTEC and\or LDTEC and\or any Temporary Received TEC less any Temporary Donated TEC for the relevant Period set out in Appendix C to the relevant Bilateral Embedded Generation Agreement save as expressly permitted and instructed pursuant to the Fuel Security Code or as may be necessary or expedient in accordance with Good Industry Practice.
- 3.2.4 Subject to the other provisions of the CUSC and the Grid Code and any relevant Bilateral Agreement, The Company shall, as between The Company and that User, accept into the GB Transmission System power generated by each User up to the Transmission Entry Capacity and (if any) STTEC and\or any Temporary Received TEC less any Temporary Donated TEC for the relevant Period set out in Appendix C of the relevant Bilateral Connection Agreement except to the extent (if any) that The Company is prevented from doing so by transmission constraints which could not be avoided by the exercise of Good Industry Practice by The Company.

3.2.7 Outages

Subject to the provisions of the **Grid Code**, **The Company** and each **User** (with **Plant** and/or **Apparatus**) shall, as between **The Company** and that **User**, be entitled to plan and execute outages of parts of in the case of **The Company**, the **GB Transmission System** or **Transmission Plant** or **Transmission Apparatus** and in the case of a **User**, its **System** or **Plant** or **Apparatus**, at any time and from time to time.

3.2.53.2.8 Commissioning

The Company agrees to assist the User (if requested by the User), with the commissioning and on-load testing of the User's Equipment or equipment for which the User is responsible (as defined in Section K of the Balancing and Settlement Code) and the User shall pay reasonable The Company Charges in connection therewith. The User must ensure the commissioning programme for the User's Equipment or equipment for which the User is responsible (as defined in Section K of the Balancing and Settlement Code) at the site of connection agreed between the User and the owner/operator of the Distribution System contains adequate provisions in respect of the timing of commissioning to ensure that the User can be in receipt of an Operational Notification before or during (as appropriate) the said commissioning programme.

3.2.63.2.9 Operational Notification

Upon compliance by the **User** with the provisions of Paragraph **3.2.23.2.6**(a) after the commissioning programme in Paragraph 3.2.63.2.8 and subject, if The Company so requires, to Transmission Reinforcement Works being carried out and/or notification by the User that the site of connection of the User's Equipment or equipment for which the User is responsible (as defined in Section K of the **Balancing and Settlement Code**) to the Distribution System is operational (any or all as appropriate) The Company shall forthwith notify ("Operational **Notification**") the **User** in writing that it has the right to use the **GB Transmission System**. It is an express condition of the **CUSC** that in no circumstances will the **User** use or operate the User's Equipment or Equipment for which the User is responsible (as defined in Section K of the Balancing and Settlement Code) without receiving this Operational Notification.

3.3 1.3 OTHER SITE SPECIFIC TECHNICAL CONDITIONS FOR EMBEDDED POWER STATIONS AND DISTRIBUTION INTERCONNECTORS

÷.

<u>3.3.1</u> 1.3.1

(a) **The Company** and each **User** shall, as between **The Company** and that **User**, operate respectively the **GB**

Transmission System and the **User System** with the special automatic facilities and schemes set out in Appendix F3 to the relevant **Bilateral Embedded Generation Agreement**.

- (b) Each User shall ensure the User's Equipment complies with the site specific technical conditions set out in Appendix F4 to the relevant Bilateral Embedded Generation Agreement.
- (c) Each User shall use all reasonable endeavours to ensure during the period of the relevant Bilateral Embedded Generation Agreement that the User's Equipment shall continue to comply with the site specific technical conditions set out in Appendix F5 to the relevant Bilateral Embedded Generation Agreement.
- 3.3.2 1.3.2 If a User or The Company wishes to modify, alter or otherwise change the site specific technical conditions or the manner of their operation under Appendices F1, F3, F4 or F5 to the relevant Bilateral Embedded Generation Agreement this shall be deemed to be a Modification for the purposes of the CUSC.
- 3.3.3 Here in the case of a site **Commissioned** in England and Wales prior to the **Transfer Date**, on or immediately prior to the **Transfer Date** a **User's Equipment** subject to a **Bilateral Embedded Generation Agreement** has any of the following technical attributes or facilities:
 - (a) control arrangements
 - (b) voltage and current signals for system monitoring
 - (c) control telephony
 - (d) operational metering

the User shall, as between The Company and that User, use all reasonable endeavours to ensure that during the period of such Bilateral Agreement the User's Equipment which is subject to that Bilateral Agreement retains such technical attributes or facilities provided always that if the User wishes to modify, alter or otherwise change the same or their operation it may do so by following the procedures relating to a Modification in accordance with the CUSC.

PART IB - GENERAL - SUPPLY

This Part IB deals with rights and obligations relating to **Suppliers** generally and, in relation to certain provisions, to **Suppliers** supplying **Non-Embedded Customers**. References to "**User**" in this Part IB should be construed accordingly.

<u>3.4</u> <u>1.4</u> RIGHTS TO USE THE GB TRANSMISSION SYSTEM

- **3.4.1** Subject to the other provisions of the **CUSC** and the **Grid Code**, each **User**, as between **The Company** and that **User**, may take supplies of power from the **GB Transmission System**.
- **3.4.2 1.4.2** Subject to the provisions of the **CUSC** and the **Grid Code**, **The Company** shall, as between **The Company** and that **User**, transport a supply of power through the **GB Transmission System** to the level forecast by the **User** from time to time pursuant to the **Data Requirements** set out in Part IIB of this Section 3 submitted by that **User** together with such margin as **The Company** shall in its reasonable opinion consider necessary having due regard to **The Company** 's duties under the **Transmission Licence** except to the extent (if any) that **The Company** is prevented from doing so by transmission constraints or by insufficiency of generation which, in either case, could not have been avoided by the exercise of **Good Industry Practice** by **The Company**.
- 3.4.3 Subject to the provisions of the Grid Code, The Company shall be entitled to plan and execute outages of parts of the GB Transmission System or Transmission Plant or Transmission Apparatus at any time and from time to time.

3.5 SUPPLIER CUSTOMER DETAILS

- 3.5.1 1.5.1 Each User shall, as between The Company and that User, give written notice to The Company of the following details of all exit points from time to time in existence between any Distribution System and the User's customer:-
 - (a) the electrical location and nomenclature of the Energy Metering Equipment installed in relation to each such customer;
 - (b) the identity of the operator of the **Distribution System** to which such customers are connected;
 - (c) the Grid Supply Point and Transmission Network Use of System Demand Zone meeting the Demand (Active Power) of each customer;
 - (d) the loss factors applying to the **Energy Metering Equipment** installed in relation to each such customer,

save where the **User's** customer is connected to a **Distribution System** owned by a **Public Distribution System Operator** in which case the **Public Distribution System Operator's** published statement of loss factors shall apply.

Such written notice shall be given to **The Company** no later than 28 days prior to the commencement or cessation of use of any such exit point. If the **Grid Supply Point** referred to in (c) changes the **User** shall notify **The Company** forthwith after being notified of such change by the **Public Distribution System Operator** in question. If **The Company's** basis of charging changes pursuant to the **Charging Statements** or, subject thereto, Parts II and III below at any time, **The Company** shall be entitled to ask for other information it reasonably requires for charging purposes under this Paragraph 3.5.

3.5.2 **1.5.2 CUSC Parties** agree that, insofar as **The Company** has alternative reasonable means of obtaining this information then Paragraph 3.5.1 shall not apply.

<u>3.6</u> SUPPLIERS OF NON-EMBEDDED CUSTOMERS

- **3.6.1 1.6.1** This Paragraph 3.6 relates specifically to the position of a **Supplier** in respect of its supply of electricity to a **Non-Embedded Customer**. Insofar as the provisions of this Paragraph 3.6 conflict with any other provision of this Section 3 dealing with an equivalent issue, the provisions of this Paragraph 3.6 shall prevail in relation to such a category.
- 3.6.2 1.6.2 In the case of such a User, subject to the provisions of the CUSC and the Grid Code, The Company shall transport a supply of power through the GB Transmission System to the Connection Site of the Non-Embedded Customer to the level forecast by the User from time to time pursuant to the Data Requirements set out in Part IIB of this Section 3 submitted by that User together with such margin as The Company shall in its reasonable opinion consider necessary having due regard to The Company's duties under the Transmission Licence except to the extent (if any) that The Company is prevented from doing so by transmission constraints or by insufficiency of generation which, in either case, could not have been avoided by the exercise of Good Industry Practice by The Company.
- **3.6.3 1.6.3** The right in 3.6.2 above is subject to:
 - (a) the **User** being authorised by a current **Supply Licence** to supply electricity to the premises to be supplied with electricity through the **Connection Site**; and

- (b) there being a subsisting **Bilateral Connection Agreement** with the **Non-Embedded Customer** for the **Connection Site**.
- **3.6.4 1.6.4** Where **The Company** agrees, the **Supplier** of a **Non-Embedded Customer** may be liable for payment of **Connection Charges** in relation to the **Metering Equipment** of a **Non-Embedded Customer**. The existence of such an arrangement shall be reflected in the relevant **Bilateral Connection Agreement** with the **Non-Embedded Customer** and the **Use of System Supply Confirmation Notice**. Where such an arrangement exists, the provisions of Section 2 Part II in relation to such charges shall be deemed incorporated within this Paragraph 3.6.4 and the **Supplier** shall comply with those provisions in relation to such charges as if references to the **User** were references to the **Supplier**.
- 3.6.5 The User acknowledges that breach of the provisions of the CUSC by the Non-Embedded Customer may give rise to Deenergisation of the Non-Embedded Customer's Connection Site pursuant to Section 5.
- 3.6.6 The User acknowledges that site specific technical conditions as provided for in Paragraphs 2.7 to 2.9 of the CUSC may apply between The Company and a Non-Embedded Customer at a Connection Site.
- 3.6.7 The Company shall be entitled to Deenergise the Non-Embedded Customer's Equipment at any Connection Site when instructed to do so by the Non-Embedded Customer in accordance with the terms of its Bilateral Connection Agreement or the CUSC.
- <u>3.6.8</u> **1.6.8** Where the **Supplier** supplying the **Connection Site** has informed **The Company** that it has received an order or direction from the Secretary of State for Energy under the Energy Act 1976 or the Act, requiring it to cease supplying the Non-Embedded Customer with electricity and instructs The Company to Deenergise the Non-Embedded Customer's User's Equipment at the Connection Site, The Company shall as soon as reasonably practicable Deenergise Non-Embedded Customer's User's Equipment at the the Connection Site (unless The Company considers that it is not reasonably practicable, whether on technical grounds or otherwise, to effect such **Deenergisation**) and if it does **Deenergise**, shall promptly notify the User of the date and time at which such Deenergisation was effected. The **User** shall reimburse **The Company** any expense incurred in relation to such **Deenergisation**, if any, and shall indemnify **The Company** against any costs, liability, loss or damage suffered by **The Company** as a result of such **Deenergisation**.
- 3.7 1.7 USE OF SYSTEM APPLICATION

- 3.7.1 If a User wishes to use the GB Transmission System in a category of use which does not include connection to the GB Transmission System, it shall complete and submit to The Company a Use of System Application and comply with the terms thereof.
- 3.7.2 Hithout prejudice to Standard Condition C8 of the Transmission Licence The Company shall make a Use of System Offer to that User as soon as practicable after receipt of the Use of System Application and (save where the Authority consents to a longer period) in any event not more than 28 days after receipt by The Company of the Use of System Application.
- 3.7.3 1.7.3 The Use of System Offer shall in the case of an application relating to an Embedded Power Station or to a Small Power Station Trading Party or to a Distribution Interconnector be in the form of a Bilateral Embedded Generation Agreement together with any Construction Agreement relating thereto. In the case of a Supplier, it shall be in the form of a Use of System Supply Offer Notice. The provisions of Standard Condition C8 shall apply to an application by a Supplier as if the Use of System Supply Offer and Confirmation Notice was an agreement for the purposes of that condition.
- 3.7.4 The Use of System Offer shall remain open for acceptance for 3 months from its receipt by that User unless either that User or The Company makes an application to the Authority under Standard Condition C9 of the Transmission Licence, in which event the Use of System Offer shall remain open for acceptance until the date 14 days after any determination by the Authority pursuant to such application.
- 3.7.5 Upon acceptance of the Use of System Offer (as offered by The Company or determined by the Authority) by the User and execution by The Company of the Bilateral Embedded Generation Agreement or the issuing by The Company of a Use of System Supply Confirmation Notice, as the case may be, the User shall have the right to use the GB Transmission System. Such right shall continue until the Bilateral Embedded Generation Agreement is terminated or a Use of System Termination Notice is submitted pursuant to Paragraph 3.8.
- **<u>3.7.6</u>** Such rights shall be conditional upon the **Applicant**, if it is not already a party to the **CUSC Framework Agreement**, becoming a party to the **CUSC Framework Agreement**.
 - 3.7.7 In the event that the **User** requests a **Use of System Offer** in the form of a **Bilateral Embedded Generation Agreement** on the basis of a **Design Variation** then:
 - (i) The Company shall only be obliged to provide such an offer in so far as such an offer satisfies the conditions detailed in Chapter 3 of the GB SQSS; and

- (ii) The Company shall be obliged, at the request of the User as part of the Use of System Offer, to provide such information that the User may reasonably require in order to assess the probability of Notification of Restrictions on Availability being issued. For the avoidance of doubt, the information that is provided by The Company under this clause shall be a best estimate only and is not legally binding.
- 3.7.8 For the avoidance of doubt, the provisions of this Paragraph 3.7 of Section 3 of the CUSC shall not apply to a User's application for a Short Term Access Product or Shared Access Capacity in accordance with Appendix 3 of Section 3 of the CUSC.

3.8 **1.8** TERMINATION PROVISIONS

- 3.8.1 Provisions relating to **Disconnection** relating to **Users** who have **Bilateral Embedded Generation Agreements** are dealt with in Section 5.
- **3.8.2 1.8.2** In addition to the provisions in Section 5, this paragraph deals with termination of the right to use the system in respect of a **Supplier** who in that category of connection and/or use has no physical presence on the **System** and with a specific additional provision for the **Supplier** of a **Non-Embedded Customer**.
 - 3.8.3 (a) A Supplier may terminate its use of the GB Transmission System by giving The Company a Use of System Termination Notice not less than 28 days prior to such termination of use.
 - (b) If a Use of System Termination Notice is given under this Section 3, the right to use the GB Transmission System shall cease upon the termination date in the Use of System Termination Notice.
 - (c) Prior to cessation of use by a User under this Paragraph, the User shall pay The Company all Use of System Charges payable by it under Section 3 in respect of the Financial Year in which the cessation takes place.
 - 3.8.4 In addition, in the case of a **User** in its category of connection and/or use as a **Supplier** of a **Non-Embedded Customer** the use of the **GB Transmission System** in respect of the **Connection Site** shall cease upon either **Disconnection** of the **User's Equipment** of the **Non-Embedded Customer** or termination of the **Bilateral Connection Agreement** in respect of that **Connection Site**.

PART II - USE OF SYSTEM CHARGES

PART IIA - GENERAL

<u>3.9</u> USE OF SYSTEM CHARGES

General Liability to pay Use of System Charges

<u>3.9.1</u> **1.9.1** Subject to the provisions of the **CUSC**, and any relevant **Agreement.** together with the relevant Bilateral Charging Statements, each User shall with effect from the relevant date set out in the relevant **Bilateral Agreement** (or in the **Use of System Supply** Confirmation Notice) be liable to pay to The Company the Use of System Charges in accordance with the CUSC calculated in accordance with the Statement of Use of System Charges and the Statement of the Use of System Charging Methodology and Standard Condition C13 of the Transmission Licence. The Company shall apply and calculate the Use of System Charges in accordance with the Statement of Use of System Charges and the Statement of the Use of System Charging Methodology and Standard Condition C13 of the Transmission Licence.

Liability for payment of Transmission Network Use of System Charges

3.9.2 <u>1.9.2</u> Each User shall, as between The Company and that User, in accordance with this Part II and Paragraph 6.6, be liable to pay to The Company (or The Company shall be so liable to pay to the User) the Transmission Network Use of System Charges Charges and (if appropriate) the STTEC and LDTEC Charge Charges respect of its use of the GB Transmission System applied and calculated in accordance with the Statement of Use of System Charges and Statement of the Use of System Charging Methodology and Standard Condition C13 of the Transmission Licence.

Liability for Short Term Access Product Charges

3.9.3 Each User shall, as between The Company and that User, in accordance with this Part II and Paragraph 6.6 and Appendix 3 to this Section 3, be liable where appropriate to pay to The Company the Short Term Access Product Charges in respect of its use of the GB Transmission System applied and calculated in accordance with the Statement of Use of System Charges, Statement of the Use of System Charging Methodology [and Appendix 3] and Standard Condition C13 of the Transmission Licence.

Liability for payment of Entry Overrun Charges

3.9.4 Each User shall, as between The Company and that User, in accordance with this Part II and Paragraph 6.6 and Appendix 3, be liable where appropriate to pay to The Company (or The Company shall be so liable to pay to the User) Entry Overrun Charges in respect of its use of the GB Transmission System over and above its Access Capacity applied and calculated in accordance with the Statement of Use of System Charges and Statement of the Use of System Charging Methodology and Standard Condition C13 of the Transmission Licence.

Liability for Balancing Services Use of System Charges

3.9.5 Except in respect of **Distribution Interconnector Owners** each **User** shall, as between **The Company** and that **User**, in accordance with this Part II and Paragraph 6.6, be liable to pay to **The Company** in respect of each **Settlement Day** the **Balancing Services Use of System Charges** calculated in accordance with the **Statement of the Use of System Charging Methodology**.

Provision of Security

- 3.9.6 <u>1.9.4</u> Each User shall, as between The Company and that User, provide The Company with Security Cover in respect of Transmission Network Use of System Demand Reconciliation Charges, Transmission Services Use of System Charges and Balancing Services Use of System Charges, Short Term Access Products Charges and Entry Overrun Charges in accordance with Part III below and Appendix 3 to this Section 3 of the CUSC.
- 3.9.7 1.9.5 The charges payable in relation to use of the **GB Transmission** System may also include **One-off Charges** where those are to be payable by the relevant **User** as provided in the relevant **Bilateral Embedded Generation Agreement**. In that case, the relevant provisions of Section 2 will apply to that **User** in relation to the **One-off Charges**.

PART IIB – TRANSMISSION NETWORK USE OF SYSTEM CHARGES

3.101.10 DATA REQUIREMENTS

General Submission of Data

3.10.1 1.10.1 On or before the end of the second week of December in each **Financial Year**, each **User** shall supply **The Company** with such data as described under Section 3.10 as **The Company** may from time to time reasonably request to enable **The Company** to calculate the tariffs for the **Transmission Network Use of System Charges** pursuant to the **Charging Statements** for the **Financial Year** to which the data relates.

- 3.10.2 1.10.2 On or before the 10th day of March in each Financial Year, each User shall supply The Company on The Company's reasonable request with its Demand Forecast for the following Financial Year pursuant to the Charging Statements to enable The Company to use such Demand Forecast as the basis for calculation of the Transmission Network Use of System Charges for the Financial Year to which the Demand Forecast relates.
- 3.10.3 1.10.3 In the event that a User fails to provide a Demand Forecast in accordance with Paragraph 3.10.2 above the User shall be deemed to have submitted as its Demand Forecast the last Demand Forecast supplied under Paragraph 3.11.1.
- 3.10.4 Here a Use of System Supply Confirmation Notice is completed during a Financial Year, the User shall supply The Company, with its Demand Forecast for that Financial Year on or before the 10th day of the month following completion of the Use of System Supply Confirmation Notice.

Provision of TEC Forecast

3.10.5 <u>1.10.5</u>On or before the end of the second week in December in each Financial Year, each User that is liable for generation Use of System Charges in accordance with <u>Paragraph</u> 3.9 <u>of</u> <u>the CUSC</u> shall supply The Company with a forecast maximum TEC for the following year, to inform The Company of the forecast generation to be used for the purposes of setting TNUos Tariffs.

Provision of LCN Forecast

3.10.6 On or before the end of the second week in December in each Financial Year, each User that is liable for generation Use of System Charges in accordance with Paragraph 3.9 of the CUSC shall supply The Company with a forecast maximum LCN for the following year, to inform The Company of the forecast generation to be used for the purposes of setting TNUos Tariffs.

3.1111.11 VARIATION OF FORECASTS DURING THE FINANCIAL YEAR

3.11.1 Each User shall notify The Company of any revision to its Demand Forecast at least quarterly or at such intervals as may be agreed between The Company and the User from time to time. 3.11.2 Subject to Paragraph 3.12, The Company shall revise the Transmission Network Use of System Charges payable by a User to take account of any revised Demand Forecast and shall commence charging the revised Transmission Network Use of System Charges from the first day of the month following the month in which such revised Demand Forecast was received provided always that such Demand Forecast is provided before the 10th day of such month.

3.12 VALIDATION OF DEMAND FORECASTS

- 3.12.1 The **Demand Forecast** shall represent a **User's** reasonable estimate of its **Demand**.
- 3.12.2 The Company shall notify the User in the event that the Transmission Network Use of System Charges due from the User to The Company or from The Company to the User (as the case may be) calculated by The Company using the Demand Forecast differ by more than 20% from that calculated by The Company using The Company's forecast Demand as provided for in the Charging Statements.
- 3.12.3 In the event that **The Company** does not receive a satisfactory explanation for the difference between the **Demand Forecast** and **The Company's** forecast **Demand** or a satisfactory revised **Demand Forecast** from the **User** within 5 **Business Days** of such notice then **The Company** shall be entitled to invoice a **User** for **Transmission Network Use of System Charges** calculated on the basis of **The Company** forecast **Demand**.
- 3.12.4 Any dispute regarding a **Demand Forecast** or the resulting **Transmission Network Use of System Charges** shall be a **Charging Dispute**.

3.13 RECONCILIATION STATEMENTS

Calculation of Initial Reconciliation

3.13.1 On or before 30 June in each Financial Year, The Company shall promptly calculate in accordance with the Statement of the Use of System Charging Methodology and the Statement of Use of System Charges the Demand related or generation related Transmission Network Use of System Charges (as the case may be) that would have been payable by the User during each month during the preceding Financial Year (Actual Amount). The Company shall then compare the Actual Amount with the amount of Demand related or generation related Transmission Network Use of System Charges (as the case may be) paid each month during the preceding Financial Year by the User (the "Notional Amount").

Generation Reconciliation

- 3.13.2 As soon as reasonably practicable and in any event by 30 April in each Financial Year The Company shall prepare a generation reconciliation statement (the "Generation Reconciliation Statement") in respect of generation related Transmission Network Use of System Charges and send it to the User. Such statement shall specify the Actual Amount and the Notional Amount of generation related Transmission Network Use of System Charges for each month during the relevant Financial Year and, in reasonable detail, the information from which such amounts were derived and the manner in which they were calculated.
- 3.13.3 Together with the Generation Reconciliation Statement, The Company shall issue a credit note in relation to any sums shown by the Generation Reconciliation Statement to be due to the User or an invoice in respect of sums due to The Company and in each case interest thereon calculated pursuant to Paragraph 3.13.6 below.

Initial Demand Reconciliation Statement

- 3.13.4 As soon as reasonably practicable and in any event by 30 June in each Financial Year The Company shall then prepare an initial Demand reconciliation statement (the "Initial Demand Reconciliation Statement") in respect of Demand related Transmission Network Use of System Charges and send it to the User. Such statement shall specify the Actual Amount and the Notional Amount of Demand related Transmission Network Use of System Charges for each month during the relevant Financial Year and, in reasonable detail, the information from which such amounts were derived and the manner in which they were calculated.
- 3.13.5 Together with the **Initial Demand Reconciliation Statement The Company** shall issue a credit note in relation to any sum shown by the **Initial Demand Reconciliation Statement** to be due to the **User** or an invoice in respect of sums due to **The Company** and in each case interest thereon calculated pursuant to Paragraph 3.13.6.
- 3.13.6 General Provisions
 - (a) Invoices issued under paragraphs 3.13.3 and 3.13.5 above and 3.13.8 (b) below shall be payable within 30 days of the date of the invoice.
 - (b) Interest on all amounts due under this Paragraph 3.13 shall be payable by the paying CUSC Party to the other on such amounts from the date of payment applicable to

the month concerned until the date of actual payment of such amounts and such interest shall be calculated on a daily basis at a rate equal to the **Base Rate** during such period.

3.13.7 Final Reconciliation Statement

- (a) The Company shall as soon as reasonably practicable following receipt by it of the Final Reconciliation Settlement Run or Final Reconciliation Volume Allocation Run as appropriate in respect of the last Settlement Day in each Financial Year issue a further Demand reconciliation statement (the "Final Demand Reconciliation Statement") in respect of Demand related Transmission Network Use of System Charges payable in respect of each month of that Financial Year showing:-
 - (i) any change in the Demand related Transmission Network Use of System Charges from those specified in the Initial Demand Reconciliation Statement provided in accordance with Paragraph 3.13.4;
 - (ii) whether the change represents a reconciliation payment owing by The Company to a User or by a User to The Company;
 - (iii) the amount of interest determined in accordance with Paragraph 3.13.6 above; and
 - (iv) the information from which the amounts in (i) above are derived and the manner of their calculation.
- (b) Together with the Final Demand Reconciliation Statement The Company shall issue a credit note in relation to any sum shown in the Final Demand Reconciliation Statement to be due to the User or an invoice in respect of sums due to The Company and in each case interest thereon calculated pursuant to Paragraph 3.13.6.
- (c) Payment of any invoice issued pursuant to Paragraph 3.13.7(b) above or the application of any credit note issued pursuant to that paragraph against any liability of the User to The Company for Demand related Transmission Network Use of System Charges will be in full and final settlement of all Demand related Transmission Network Use of System Charges for the Financial Year to which the invoice or credit note relates provided that nothing in this Paragraph 3.13.8(c) shall

affect the rights of the parties under the provisions of Paragraph 7.3.5.

3.13.8 The right to submit Generation Reconciliation Statements, Initial Demand Reconciliation Statements and Final Demand Reconciliation Statements and the consequential invoices and/or credit notes shall survive the termination of the User's rights under the CUSC and the parties agree that the provisions contained in Paragraphs 3.13 and 3.14 shall continue to bind them after such termination (the version in existence at the date of termination being the applicable version in the case of any amendments).

3.14 **REVISION OF CHARGES**

- 3.14.1 Pursuant to the Transmission Licence and/or the CUSC and/or the Charging Statements and/or the Bilateral Agreements The Company may revise its Transmission Network Use of System Charges, Short Term Access Products Charges and/or Entry Overrun Charges or the basis of their calculation. Where The Company proposes a change to the Transmission Network Use of System Charges, Short Term Access Products Charges and/or Entry Overrun Charges then it shall notify the User as soon as practicable after the proposal is made to the Authority pursuant to the Transmission Licence.
- 3.14.2 The **User** acknowledges that due to the timescales associated with the replacement of the Pooling and Settlement Agreement with the Balancing and Settlement Code, The **Company** was prevented from providing the **User** with notice pursuant to Clause 2.1 of Part 1 of Appendix E (as in force on the day prior to the NETA Go-live Date) of the basis of calculation of Transmission Network Use of System Charges from the NETA Go-live Date until the end of the Financial Year in which the NETA Go-live Date occurred. However, the **User** further acknowledges that **The Company** consulted with the User prior to the NETA Go-live Date on Transmission Network Use of System Charges to apply from the NETA Go-live Date until the end of the Financial Year in which the NETA Go-live Date occurred. The User hereby agrees to pay Transmission Network Use of System Charges in respect of the Financial Year in which the NETA Go-live Date occurred in accordance with the principles notified by The Company prior to the NETA Go-live Date.
- 3.14.3 Subject to paragraph 3.14.4 below, **The Company** shall give the **User** not less than two months prior written notice of any revised **Transmission Network Use of System Charges**, **Short Term Access Products Charges and/or Entry Overrun**

<u>Charges</u> which notice shall specify the date upon which such revisions become effective (which may be at any time) and will make reference to the new tariffs set out in the relevant **Charging Statements**. The **User** shall pay any such revised charges from the effective date.

3.14.4 Where in accordance with the **Transmission Licence**, the **Authority** determines a shorter period than 2 months for the implementation of revised charges, the notice period will be determined by the **Authority**. The notice will specify when the new charges are effective and the **User** shall pay any such revised charges from the effective date.

PART IIC - BALANCING SERVICES USE OF SYSTEM CHARGES

3.15 INTRODUCTION

- 3.15.1 Under the terms of the CUSC each User except in the case of Distribution Interconnector Owners is liable to pay Balancing Services Use of System Charges. The basis upon which Balancing Services Use of System Charges are levied and the calculation methodology and rules which will be used to quantify those charges are set out in the Statement of the Use of System Charging Methodology.
- 3.15.2 Balancing Services Use of System Charges

Notwithstanding the provisions of Paragraphs 6.6.1 and 6.6.2 the following provisions shall apply to the payment of the **Balancing Services Use of System Charges**.

- (a) The Company shall not later than 17.00 hours on the relevant Notification Date (and if this is not practicable as soon as possible thereafter as The Company, acting reasonably, considers is practicable) despatch an advice notice to the User in respect of the Settlement Day in relation to which the Balancing Services Use of System Charges are due on the relevant Payment Date.
- (b) The information on the advice notice in respect of each Settlement Day shall include the name of the User and the total amount payable to The Company in respect of Balancing Services Use of System Charges and in all cases together with any Value Added Tax thereon during each Settlement Day.
- (c) **The Company** shall, within a reasonable time thereafter provide a valid **Value Added Tax** invoice in

respect of **Balancing Services Use of System Charges** identified on the advice note.

(d) The User shall pay the Balancing Services Use of System Charges specified in the advice notice together with the Value Added Tax thereon to The Company no later than 12.30 hours on the Payment Date specified on the advice note in respect of such Settlement Date as if they were payments made in the manner specified in Paragraph 6.6.3.

3.16 **RECONCILIATION**

- 3.16.1 As soon as reasonably practicable after receipt by The Company of the Final Reconciliation Volume Allocation Run in respect of a Settlement Day The Company shall prepare and submit to each User a statement (which may form part of an invoice or other document) calculated in accordance with the data specified in the Statement of the Use of System Charging Methodology in respect of that Settlement Day ("Balancing Services Use of System Reconciliation Statement"), showing the new value (if any) of data (as specified in the Statement of the Use of System Charging Methodology in force on that Settlement Day) attributable to the User in respect of such Settlement Day and the amount of Balancing Services Use of System Charges payable by the User on the basis of the new value (the "Reconciled Charge").
- 3.16.2 In the event that:
 - (a) the Reconciled Charge exceeds the Balancing Services Use of System Charges paid by the User in respect of that Settlement Day ("Initial Charge") The Company shall at its option either:
 - (i) send to the User as soon as reasonably practicable after issue of the Balancing Services Use of System Reconciliation Statement an invoice for the amount by which the Reconciled Charge exceeds the Initial Charge and interest thereon calculated in accordance with the provisions set out in Paragraph 3.16.3; or
 - (ii) include such amount in another invoice in respect of Balancing Services Use of System Charges to the User.
 - (b) the **Reconciled Charge** is less than the **Initial Charge The Company** shall at its option either:-

- (i) send to the User as soon as reasonably practicable after issue of the Balancing Services Use of System Reconciliation Statement a credit note for the amount by which the Initial Charge exceeds the Reconciled Charge and interest thereon calculated in accordance with the provisions set out in Paragraph 3.16.3; or
- (ii) include such amount as a credit in an invoice in respect of Balancing Services Use of System Charges from The Company to the User.
- 3.16.3 Interest payable in respect of each reconciliation payment shall accrue from and including the relevant **Use of System Payment Date** up to but excluding the date upon which the amounts specified in the **Balancing Services Use of System Reconciliation Statement** are paid, and shall be at a rate equal to the **Base Rate** for the time being and from time to time. Interest shall accrue from day to day.
- 3.16.4 If **The Company** receives written notice from any **User** or from the relevant **BSC Agent** that an error has occurred in any data forming part of or used within the **Initial Volume Allocation Run** which affects the costs to **The Company** of offers and bids in the **Balancing Mechanism** accepted by **The Company** in respect of any **Settlement Day**, and that error has been ratified in accordance with the procedures for ratification set out in the **Balancing and Settlement Code** it shall use its reasonable endeavours to, as soon as reasonably practicable after receipt of such notice, issue a dispute reconciliation statement ("**Dispute Statement**") to the **User** in respect of that **Settlement Day**.
- 3.16.5 Any **Dispute Statement** issued pursuant to Paragraph 3.16.4 above shall show the amount of **Balancing Services Use of System Charges** payable by the **User** on the basis of the ratified data.

3.16.6

(a) In the event that the amount shown in any **Dispute** Statement exceeds the aggregate amount paid by the User in respect of the Settlement Day to which the Dispute Statement relates under any invoices issued pursuant to Paragraph 3.15.2 and Paragraph 3.16.2 above (after taking into account any credit notes issued) The Company shall submit to the User a further invoice for such excess and interest thereon calculated in accordance with Paragraph 3.16.3;

- (b) In the event that the amount shown in any **Dispute** Statement is less than the aggregate amount paid by the User in respect of the Settlement Day to which the Dispute Statement relates under any invoices issued pursuant to Paragraph 3.15.2 and Paragraph 3.16.2 above (after taking into account any credit notes issued) The Company shall submit to the User a credit note for the amount by which the amount paid exceeds the amount shown in the Dispute Statement together with interest thereon calculated in accordance with Paragraph 3.16.3.
- 3.16.7 If at any time prior to receipt by **The Company** of the **Final Reconciliation Volume Allocation Run** in respect of a **Settlement Day The Company** receives written notice from any **User** or the relevant **BSC Agent** of an error occurring in any data forming part of or used within the **Initial Volume Allocation Run** or the **Reconciliation Volume Allocation Run** which in either case affects the data (as specified in the **Statement of the Use of System Charging Methodology**) used in the calculation of **Balancing Services Use of System Charges** for that **Settlement Day**, which error:-
 - (a) is not taken into account in the **Final Reconciliation Volume Allocation Run**; and
 - (b) has been ratified in accordance with the procedures for ratification set out in the **Balancing and Settlement Code**,

then **The Company** shall use its reasonable endeavours to prepare the **Balancing Services Use of System Reconciliation Statement** on the basis of the ratified data.

- 3.17 The right to submit **Balancing Services Use of System Reconciliation Statements** and **Dispute Statements** and the consequential invoices and/or credit notes shall survive the termination of the **User's** rights under the **CUSC** and the parties agree that the provisions of this Part II shall remain in full force and effect and shall continue to bind them after such termination (the version in existence as at the date of termination being the applicable version, in the case of any amendments).
- 3.18 **The Company** and each **User** hereby agree and acknowledge that the provisions of Part IIC will apply to all **Balancing Services Use of System Charges** payable in respect of any **Settlement Day** on or after the **NETA Go-live Date**. The provisions of Paragraphs 1.1 to 1.6 inclusive of Part 2 of the form of Appendix E in force on the day prior to the **NETA Go-live Date** shall continue to apply *mutatis mutandis* to all

Transmission Services Use of System Charges payable in respect of any Settlement Day up to the NETA Go-live Date.

3.19 **RECONCILIATION PAYMENTS**

Each **User**, or as the case may be, **The Company**, shall pay the amounts set out in any invoice or credit note issued pursuant to Paragraphs 3.15.2 or 3.15.6 respectively above, either in accordance with the applicable requirements for payment of other sums due under that invoice in the case of sums shown in an invoice also dealing with other payments, or in other cases within 5 **Business Days** of the date of the **Balancing Services Use of System Reconciliation Statement** or **Dispute Statement** as appropriate.

3.20 REVISION OF CHARGES

- 3.20.1 Subject to Paragraph 3.20.2 below, **The Company** shall give the **User** not less than 2 months prior written notice of any revision to the **Statement of the Use of System Charging Methodology** which will affect the application and calculation of the **Balancing Services Use of System Charges**, which notice shall specify the date upon which such revisions become effective (which may be at any time). The **User** shall pay any such revised charges with effect from the date specified in such notice.
- 3.20.2 Where in accordance with the **Transmission Licence**, the **Authority** determines a shorter period than two months for the implementation of a revision to the charges which will affect the application and calculation of the **Balancing Services Use of System Charge**, the notice period will be determined by the **Authority**. The notice will specify when the revision is effective and the **User** shall pay any such revised charges with effect from the date specified in such notice.

PART III - CREDIT REQUIREMENTS

3.21 <u>BSUOS</u> <u>CHARGES AND TNUOS DEMAND CHARGES</u>; <u>PROVISION OF SECURITY COVER</u>

3.21.1 Each User required to pay Use of System Charges shall provide Security Cover for Balancing Services Use of System Charges and, Transmission Network Use of System

Demand Charges, Short Term Access Products Charges and Entry Overrun Charges from time to time in accordance with this Part III. and the provisions of Appendix 3 to this Section 3 of the CUSC and Schedule 4 of the CUSC.

- 3.21.2 Each such **User** shall not later than the date of its accession to the **CUSC Framework Agreement** deliver to **The Company** evidence reasonably satisfactory:-
 - (a) to establish the **User's Allowed Credit**; and
 - (b) if required, that it has provided and is not in default under the **Security Cover** referred to in Paragraph 3.21.3 below.
- 3.21.3 The User shall be required to provide **Security Cover** where its **Security Requirement** exceeds its **User's Allowed Credit**. If such **User** is required to provide **Security Cover** it shall, not later than the date of:-
 - (a) the date of its becoming a party to the **CUSC Framework Agreement**; or
 - (b) two Business Days after NGCThe Company notifies the User in writing that the Security Cover required exceeds the Security Amount provided; or
 - (c) where and to the extent that the amount of Security Cover required exceeds the Security Amount provided as a result of a User's revised forecast given in accordance with Paragraph 3.10 within one month of such revised forecast being provided to NGCThe Company:-
 - deliver to The Company a Qualifying Guarantee in such amount as shall be notified by The Company to the User in accordance with Paragraph 3.22; and/or
 - deliver to The Company a Letter of Credit (available for an initial period of not less than 6 months) in such amount as shall be notified by The Company to the User in accordance with Paragraph 3.22; and/or
 - (iii) deliver to **The Company** cash for credit to the **Escrow Account** in such amount as shall be notified by **The Company** in accordance with Paragraph 3.22; and/or

- (iv) deliver to The Company a Bilateral Insurance Policy in such an amount as shall be notified by The Company to the User in accordance with Paragraph 3.22; and/or
- (v) deliver to The Company an Insurance Performance Bond in such an amount as shall be notified by The Company to the User in accordance with Paragraph 3.22; and/or
- (vi) delivery to The Company an Independent Security Arrangement in such an amount as shall be notified by The Company to the User in accordance with Paragraph 3.22.
- 3.21.4 The provisions of this Part III shall be in addition to any other requirements to provide security in respect of any other sums due under the terms of the **CUSC** or any **Bilateral Agreement** or **Construction Agreement**.

3.21.5 Maintenance of Security Cover

Where a User is required to provide Security Cover in accordance with the terms of this Paragraph 3.21 and the provisions of Appendix 3 to this Section 3 of the CUSC it shall at all times thereafter maintain a Security Amount equal to or more than the Security Cover applicable to it. Immediately upon any reduction occurring in the Security Amount provided by the User or any Letter of Credit or Qualifying Guarantee or Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement being for any reason drawn down or demanded respectively, the User will procure that new Letters of Credit or Qualifying Guarantees or Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement are issued or existing Letters of Credit or Qualifying Guarantees or Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement are reinstated (to the satisfaction of The Company) to their full value or cash is placed to the credit of the Escrow Account in an amount required to restore the Security Amount to an amount at least equal to the Security Cover applicable to the User, and in such proportions of Letters of Credit, Qualifying Guarantees or Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement and/or cash as the User may determine. Not later than 10 Business Days before any outstanding Letter of Credit and/or Qualifying Guarantee or Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement is due to expire, the User shall procure to the satisfaction of The **Company** that its required **Security Amount** will be available for a further period of not less than 6 months which may be done in one of the following ways:-

- (a) subject to the issuing bank continuing to have an Approved Credit Rating for an amount at least equal to the required Security Amount applicable to it (less its balance on the Escrow Account) provide The Company with confirmation from the issuing bank that the validity of the Letter of Credit has been extended for a period of not less than 6 months on the same terms and otherwise for such amount as is required by this Part III; or
- (b) provide The Company with a new Letter of Credit issued by an issuing bank with an Approved Credit Rating for an amount at least equal to the required Security Amount applicable to it (less its balance on the Escrow Account) which Letter of Credit shall be available for a period of not less than 6 months; or
- (c) subject to the entity issuing the Qualifying Guarantee continuing to have an Approved Credit Rating for an amount at least equal to the required Security Amount applicable to it (less its balance on the Escrow Account) provide The Company with confirmation from the issuing entity that the validity of the Qualifying Guarantee has been extended for a period of not less than 6 months on the same terms and otherwise for such amount as is required by this Part III; or
- (d) provide The Company with a new Qualifying Guarantee for an amount at least equal to the required Security Amount applicable to it (less its balance on the Escrow Account) which Qualifying Guarantee shall be available for a period of not less than 6 months; or
- (e) procure such transfer to **The Company** for credit to the **Escrow Account** of an amount as shall ensure that the credit balance applicable to the **User** and standing to the credit of the **Escrow Account** shall be at least equal to the required **Security Amount**; or
- (f) subject to the entity issuing the Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement continuing to meet the Requirements provide The Company with confirmation from the issuing entity that the validity of the Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement has been extended for a period of not less than 6 months on the same terms

and otherwise for such amount as is required by this Part III; or

(g) provide The Company with a new Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement for an amount at least equal to the required Security Amount applicable to it (less its balance on the Escrow Account) which Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement shall be available for a period of not less than 6 months.

3.21.6 Failure to supply or maintain Security Cover

If the User fails at any time to provide or maintain Security **Cover** to the satisfaction of **The Company** in accordance with the provisions of this Part III, The Company may at any time while such default continues, and if at such time any Letter of Credit and/or Qualifying Guarantee and/or Bilateral Insurance Policy and/or Insurance Performance Bond and/or Independent Security Arrangement forming part of the Security Amount is due to expire within 9 Business Days immediately, and without notice to the **User**, demand payment of the entire amount of any outstanding Letter of Credit and/or Qualifying Guarantee and/or Bilateral Insurance Policy and/or Insurance Performance Bond and/or Independent Security Arrangement and shall credit the proceeds of the Letter of Credit and/or Qualifying Guarantee and/or Bilateral Insurance Policy and/or Insurance Performance Bond and/or Independent Security Arrangement to the Escrow Account.

3.21.7 Substitute Letter of Credit or Qualifying Guarantee

- If the bank issuing the User's Letter of Credit ceases to (a) have the credit rating set out in the definition of Letter of Credit in this CUSC such User shall forthwith procure the issue of a substitute Letter of Credit by a bank that has such a credit rating or a Qualifying Guarantee or a Bilateral Insurance Policy Insurance or an Performance Bond or an Independent Security Arrangement or transfer to The Company cash to be credited to the Escrow Account.
- (b) If the entity providing the User's Qualifying Guarantee ceases to have an Approved Credit Rating for an amount at least equal to the required Security Amount (less the User's balance on the Escrow Account) the User shall forthwith procure a replacement Qualifying Guarantee from an entity with such a credit rating or a

Letter of Credit or a Bilateral Insurance Policy or an Insurance Performance Bond or an Independent Security Arrangement or transfer to The Company cash to be credited to the Escrow Account.

(c) If the entity providing the User's Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement ceases to meet the Requirements the User shall forthwith procure a replacement of the same or a Bilateral Insurance Policy, Insurance Performance Bond, Independent Security Arrangement, Letter of Credit, Qualifying Guarantee or transfer to The Company cash to be credited to the Escrow Account.

3.22 CREDIT MONITORING

3.22.1 Determination of Security Cover

The amount of **Security Cover** which the **User** shall be required to maintain shall be determined from time to time by **The Company** as the **User's Security Requirement** less the **User's Allowed Credit**.

3.22.2 Determination of Security Requirement

The **Security Requirement** for each **User** shall be determined as:-

- (a) the Balancing Services Use of System Charges provided for in the CUSC, where the User is a Supplier, over a 32 day period or such period as The Company acting reasonably shall specify to the User in writing from time to time taking into account the requirements for Security Cover contained in the Balancing and Settlement Code and where The Company proposes to change such period The Company shall consult with Users; and
- (b) the Balancing Services Use of System Charges provided for in the CUSC, where the User is a Generator, over a 29 day period or such period as The Company acting reasonably shall specify to the User in writing from time to time taking into account the requirements for Security Cover contained in the Balancing and Settlement Code and where The Company proposes to change such period The Company shall consult with Users; and

- (c) in relation to Transmission Network Use of System Demand Charges calculated in the following manner for each Security Period:-
 - (aa) in the Financial Year in which such charges first become due the greater of zero and the User's Base Value at Risk; and
 - (bb) in the case of subsequent **Financial Years** the greater of zero and the sum of (i) the **User's Base Value at Risk** and (ii) the **User's Forecasting Performance Related VAR**-; and
- (d) in relation to the CLDTEC Charges calculated in accordance with Paragraph 5.5.3 of Appendix 3 to this Section 3; and
- (e) in relation to the 2 Day Ahead SO Release Charges calculated in accordance with Paragraph 7.2.5(c) of Appendix 3 to this Section 3; and
- (f) in relation to the 5 Week Ahead SO Release Charges calculated in accordance with Paragraph 8.2.5(c) of Appendix 3 to this Section 3; and
- (g) in relation to the Entry Overrun Charges calculated in accordance with Paragraph 9.2.7 of Appendix 3 of this Section 3; and
- (h) interest on the amounts referred to in (a), (b), (c), (d), (e),
 (f) and (eg) above calculated in accordance with the provisions of this CUSC.

3.22.3 Calculation of HH Base Value at Risk

For each Security Period, the sum equal to the HH Base Percentage of the User's Indicative Annual HH TNUoS Charge calculated on the basis of the latest Demand Forecast received by The Company.

3.22.4 Calculation of NHH Base Value at Risk

For each Security Period, the sum equal to the NHH Base Percentage of the User's Indicative Annual NHH TNUoS Charge calculated on the basis of the latest Demand Forecast received by The Company.

3.22.5 Notification of **Deemed HH Forecasting Performance**

Following the issue of the Initial Demand Reconciliation Statement in respect of the previous Financial Year, The Company shall notify the User, of the Deemed HH Forecasting Performance to be used in the calculation of the User's HH Performance Related Var. Such notice shall be given at least two months prior to the first of the Security Periods to which it relates.

3.22.6 Notification of **Deemed NHH Forecasting Performance**

Following the issue of the Initial Demand Reconciliation Statement in respect of the previous Financial Year, The Company shall notify the User, of the Deemed NHH Forecasting Performance to be used in the calculation of the User's NHH Performance Related Var. Such notice shall be given at least two months prior to the first of the Security Periods to which it relates.

3.22.7 Revision of Deemed HH Forecasting Performance

If the User has experienced a significant increase in the amount of **Demand** taken by its **Customers** during the last five months of the previous Financial Year and believes that this has had a significant effect on their **Deemed HH Forecasting Performance**, then no later than one month from the date of the notification given to the **User** under paragraph 3.22.5, the User may request that The Company revises the Deemed HH Forecasting Performance. Upon raising such a request, the User must provide information to The Company relating to the size of the reported **Demand** increase and the **Reported** Period(s) of Increase. Where for any Reported Period of **Increase** the resulting increase in **Demand** equates to a level that is in excess of one percent of the Actual Amount of HH Charges in respect of the previous Financial Year, The **Company** shall, within one month of receiving such a request, recalculate the **Deemed HH Forecasting Performance** on the basis set out in Appendix 2 Paragraph 4. A User shall not be entitled to raise more than one request by reference to any period or part period covered in another Reported Period of **Increase** in respect of which a request has been raised under this Paragraph.

3.22.8 Revision of **Deemed NHH Forecasting Performance**

If the **User** has experienced a significant increase in the amount of **Demand** taken by its **Customers** during the last five months of the previous **Financial Year** and believes that this has had a significant effect on their **Deemed NHH Forecasting Performance**, then no later than one month from the date of the notification given to the **User** under paragraph 3.22.6, the

User may request that The Company revises the Deemed NHH Forecasting Performance. Upon raising such a request, the User must provide information to The Company relating to the size of the reported Demand increase and the Reported Period(s) of Increase. Where for any Reported Period of Increase the resulting increase in Demand equates to a level that is in excess of one percent of the Actual Amount of NHH Charges in respect of the previous Financial Year, The Company shall within one month of receiving such a request, recalculate the Deemed NHH Forecasting Performance on the basis set out in Appendix 2 Paragraph 7. A User shall not be entitled to raise more than one request by reference to any period or part period covered in another Reported Period of Increase in respect of which a request has been raised under this Paragraph.

3.22.9 Review of Security Cover

The Company shall keep under review the Security Cover relating to the User and shall promptly advise the User whenever the Security Amount maintained by the User is more or less than the amount required to be maintained pursuant to this Paragraph 3.22.

3.22.10 Decrease of Security Cover

If The Company reasonably determines that the User's required Security Cover has decreased, it shall so notify the User. The Company shall consent to an appropriate reduction in the available amount of any outstanding Qualifying Guarantee or Letter of Credit or Bilateral Insurance Policy or Insurance Performance Bond or Independent Security Arrangement and/or shall repay to the User such part of the deposit held in the Escrow Account for the account of the User (together with all accrued interest on the part to be repaid) sufficient to reduce the User's Security Amount to the level of Security Cover applicable to it within 5 Business Days of the User's consent.

3.22.11 Notification in respect of Security Cover

The Company shall notify each User promptly if:-

(a) that User fails to provide, maintain, extend or renew a Qualifying Guarantee or a Letter of Credit or a Bilateral Insurance Policy or an Insurance Performance Bond or an Independent Security Arrangement which it is required to provide, maintain, extend or renew pursuant to Paragraphs 3.21 or 3.22 inclusive;

- (b) The Company shall make a demand under any such Qualifying Guarantee or a call under a Letter of Credit or a Bilateral Insurance Policy or an Insurance Performance Bond or an Independent Security Arrangement; or
- (c) **The Company** becomes aware that that **User**:
 - shall cease to have an Approved Credit Rating or shall cease to have an Approved Credit Rating for an amount at least equal to the User's Security Requirement, or
 - (ii) shall be placed on a credit watch by the relevant credit rating agency (or becomes subject to an equivalent procedure) which in any case casts doubt on the User retaining an Approved Credit Rating or an Approved Credit Rating for an amount at least equal to the User's Security Requirement or maintaining the Credit Assessment Score given by the User's Independent Credit Assessment, or
 - (iii) shall be in default under the additional or alternative security required to be provided pursuant to this Part III; or
- (d) The Company becomes aware that any bank that has issued a Letter of Credit in relation to that User which has not expired shall cease to have the credit rating required by this Section; or
- (e) The Company becomes aware that any entity providing a Qualifying Guarantee or a Bilateral Insurance Policy or an Insurance Performance Bond or an Independent Security Arrangement in relation to that User which has not expired shall cease to meet the Requirements in the case of a Bilateral Insurance Policy or an Insurance Performance Bond or an Independent Security Arrangement or in the case of a Qualifying Guarantee cease to have an Approved Credit Rating for an amount at least equal to the required Security Amount (less its balance on the Escrow Account); or
- (f) NGC<u>The Company</u> becomes aware that the User's Security Requirement exceeds 85% of the User's Allowed Credit.

Provided always that the failure by **The Company** to notify the **User** pursuant to Paragraphs 3.22.9, 3.22.10 or 3.22.11 shall

not relieve the **User** of its obligations under and in accordance with the terms of this Section 3 and the **Charging Statements**.

3.22.12 Release from Security Cover Obligations

Upon a User becoming a Dormant CUSC Party or ceasing to be a **CUSC Party** and provided that all amounts owed by the User in respect of Balancing Services Use of System Charges and , Transmission Network Use of System Demand Charges, Short Term Access Products Charges and Entry Overrun Charges have been duly and finally paid and that it is not otherwise in default in any respect of any Services Use of System Charges or Balancing Transmission Network Use of System Demand Charges, Short Term Access Products Charges and Entry Overrun Charges (including in each case interest) payable under the CUSC, the User shall be released from the obligation to maintain Security Cover and The Company shall consent to the revocation of any outstanding Qualifying Guarantee or Letter of Credit or a Bilateral Insurance Policy or an Insurance Performance Bond or an Independent Security Arrangement and shall repay to the User the balance (including interest credited thereto) standing to the credit of the User on the Escrow Account at that date.

3.23 PAYMENT DEFAULT

If, by 12.30 hours on any Use of System Payment Date, The Company has been notified by a User or it otherwise has reason to believe that that **User** will not have remitted to it by close of banking business on the Use of System Payment Date all or any part ("the amount in default") of any amount which has been notified by The Company to the User as being payable by the User by way of either the Balancing Services Use of System Charges and/or, Transmission Network Use of System Demand Charges, Short Term Access Products Charges and/or Entry Overrun Charges on the relevant Use of System Payment Date, then The Company shall be entitled to act in accordance with the following provisions (or whichever of them shall apply) in the order in which they appear until **The Company** is satisfied that the **User** has discharged its obligations in respect of the Balancing Services Use of System Charges and/orCharges, Transmission Network Use of System Demand Charges, Short Term Access Products Charges and/or Entry Overrun Charges (as appropriate) under the CUSC which are payable in respect of the relevant Settlement Day (in the case of Balancing Services Use of System Charges, Short Term Access Products Charges and Entry Overrun Charges) or Financial Year (in the case of Transmission Network Use of System Demand Charges):-

- (a) **The Company** may to the extent that the **User** is entitled to receive payment from **The Company** pursuant to the **CUSC** (unless it reasonably believes that such set-off shall be unlawful) set off the amount of such entitlement against the amount in default;
- (b) The Company shall be entitled to set off the amount of funds then standing to the credit of the Escrow Account against Balancing Services Use of System Charges and/or, Transmission Network Use of System Demand Charges, Short Term Access Products Charges and/or Entry Overrun Charges (as appropriate) unpaid by the User and for that purpose The Company shall be entitled to transfer any such amount from the Escrow Account to any other account of The Company at its absolute discretion and shall notify the User accordingly;
- (c) **The Company** may demand payment under any outstanding **Letter of Credit** supplied by the **User** in a sum not exceeding the available amount of all such **Letters of Credit**;
- (d) **The Company** may demand payment under any outstanding **Qualifying Guarantee** provided for the benefit of the **User** pursuant to Paragraph 3.21.3(b);
- (e) **The Company** may demand payment under any outstanding **Bilateral Insurance Policy** provided for the benefit of the **User**;
- (f) The Company may demand payment under any outstanding Insurance Performance Bond provided for the benefit of the User;
- (g) **The Company** may demand payment under any outstanding **Independent Security Arrangement** provided for the benefit of the **User**.

3.24 UTILISATION OF FUNDS

(a) make demand under any outstanding **Qualifying Guarantee** or a call under any outstanding **Letter of Credit**, **Bilateral**

Insurance Policy, **Insurance Performance Bond** or **Independent Security Arrangement** supplied by the **User**; and

(b) to set off the funds in the Escrow Account against Balancing Services Use of System Charges and/or , Transmission Network Use of System Demand Charges, Short Term Access Products Charges and/or Entry Overrun Charges unpaid by the User and for that purpose The Company shall be entitled to transfer any such amount from the Escrow Account to any other account of The Company as it shall in its sole discretion think fit.

3.25 USER'S RIGHT TO WITHDRAW FUNDS

If a User is not in default in respect of any amount owed to The Company in respect of the Balancing Services Use of System Charges or, Transmission Network Use of System Charges, <u>Short</u> <u>Term Access Products Charges, Entry Overrun Charges</u> under the terms of the CUSC and any Bilateral Agreement to which the User is a party:-

- (a) **The Company** shall transfer to the **User** quarterly interest credited to the **Escrow Account**; and
- (b) The Company shall transfer to such User within a reasonable time after such User's written request therefor any amount of cash provided by the User by way of Security Cover which exceeds the amount which such User is required to provide by way of security in accordance with this Part III.

3.26 USER'S ALLOWED CREDIT

- 3.26.1 Each User shall notify NGC The Company promptly if:-
 - (a) it gains an **Approved Credit Rating**; or
 - (b) it ceases to have an **Approved Credit Rating**; or
 - (c) where the **User** holds an **Approved Credit Rating**, its specific investment grading changes; or
 - (d) it has reason to believe that its **Credit Assessment Score** is likely to have changed since the last **Independent Credit Assessment**.
- 3.26.2 The User's Allowed Credit extended by NGC<u>The Company</u> at any time to each User with an Approved Credit Rating shall be calculated in accordance with Paragraph 1 of Appendix 1 of this Section 3 subject to a maximum value of the Unsecured Credit Cover.

- 3.26.3 The User's Allowed Credit extended by NGCThe Company at any time to each User without an Approved Credit Rating shall be at the choice of the User the Payment Record Sum or the Credit Assessment Sum.
- 3.26.4 Unless the User has notified NGC<u>The Company</u> that it wishes its User's Allowed Credit to be to be based on the Credit Assessment Sum then, subject to Paragraph 3.26.5, for each successive month in which the User pays its Use of System Charges by the Use of System Payment Date then the User's Allowed Credit extended to such User at any time shall be calculated in accordance with Paragraph 2 of Appendix 1 of this Section 3.
- 3.26.5 Where a **User** fails to pay its **Use of System Charges** within 2 **Business Days** of the **Use of System Payment Date** its **Payment Record Sum** shall be reduced by 50% on the first such occasion within a twelve month period and shall be reduced to zero on the second occasion in such twelve month period. Upon any such failure to pay, the **User's Allowed Credit** (as adjusted following such failure in accordance with this clause) shall be calculated for successive months in accordance with Paragraph 3.26.4.
- 3.26.6 Where a User has notified NGC The Company that it wishes its User's Allowed Credit to be based on its Credit Assessment Sum, the Credit Assessment Sum extended to a User at any time shall be calculated be reference to the Credit Assessment Score given by the Independent Credit Assessment in accordance with Paragraph 3 of Appendix 1 of this Section 3.
- 3.26.7 Where a User has notified NGC<u>The Company</u> that its wishes its User's Allowed Credit to be based on the Credit Assessment Sum then the User will obtain an Independent Credit Assessment of that User. The first such Independent Credit Assessment will be at NGC<u>The Company</u>'s cost.
- 3.26.8 Where a User's Allowed Credit is based on the Credit Assessment Sum then where NGCThe Company has reason to believe that the Independent Credit Assessment last obtained is likely to have changed then NGCThe Company shall be entitled to request the User to obtain a further independent Credit Assessment. Such Independent Credit Assessment shall be at NGCThe Company's cost.
- 3.26.9 The User may obtain an Independent Credit Assessment at NGCThe Company's cost provided that NGCThe Company has not paid for an earlier Independent Credit Assessment for that User within the previous 12 months. The User may obtain further Independent Credit Assessments within such a 12 month period at the User's cost.

3.27 TRANSITIONAL ARRANGEMENTS

- 3.27.1 Recognising the changes to the **Security Cover** and **Security Requirements** introduced by the **Security Amendment** and the consequences for **The Company** and **Users** then notwithstanding the provisions of **CUSC** Section 3 Part III the following transitional provisions shall apply:
 - (a) the obligation for Users whose Security Requirement will as a result of the Security Amendment increase at the Security Amendment Implementation Date shall be to provide the difference between the Existing Security Cover and the Security Cover in full by no later than the End Date and by increasing the Existing Security Cover each month by equal monthly amounts of the difference between the existing Security Cover and the Security Cover; and
 - (b) where a User's Security Requirement at the Security Amendment Implementation Date is less than the Existing Security Cover held for that User then The Company shall release the existing Security Cover by the appropriate amount as soon as practicable and in any event within one calendar month of the Security Amendment Implementation Date.
- 3.27.2 Recognising the changes to the **Security Cover** and **Security Requirements** introduced by the **Value At Risk Amendment** and the consequences for **The Company** and **Users** then notwithstanding the provisions of **CUSC** Section 3 Part III the following transitional provisions shall apply:
 - (a) Until the Initial Demand Reconciliation Statement has been issued for the Financial Year ending at least six months following the Value At Risk Amendment Implementation Date, and The Company has calculated the Forecasting Performance Related VAR by reference to this, each User's Forecasting Performance Related VAR shall be substituted by such percentage of User's Transmission Network Use of System Demand Charges as reflects the percentage difference between the Actual Amount and the Notional Amount of the User's Transmission Network Use of System Demand Charges for the previous Financial Year, provided that where the Notional Amount exceeds the Actual Amount, the percentage shall be zero;
 - (b) the obligation for Users whose Security Requirement will increase at the Value At Risk Amendment Implementation Date as a result of the Value At Risk Amendment shall be to provide the difference between the Pre-Value At Risk Amendment Security Cover and the Security Cover in full by no later than the Value At Risk Amendment Implementation End Date and by increasing the Pre-Value At Risk Amendment Security Cover each month by equal monthly

amounts of the difference between the **Pre-Value At Risk Amendment Security Cover** and the **Security Cover**; and

(c) where a User's Security Requirement at the Value At Risk Amendment Implementation Date is less than the Pre-Value At Risk Amendment Security Cover held for that User then The Company shall release the Pre-Value At Risk Amendment Security Cover by the appropriate amount as soon as practicable and in any event within one calendar month of the Value At Risk Amendment Implementation Date.

APPENDIX 1 CREDIT ARRANGEMENTS

1 Where the User meets the Approved Credit Rating that User's Allowed Credit at any given time shall be calculated as a percentage of Unsecured Credit Cover by reference to the specific investment grade within the User's Approved Credit Rating as follows:

Approved Long Term Credit Rating		User's Allowed Credit as % of Unsecured Credit Cover	
Standard & Poor's	Moody's	Fitch	
AAA	Aaa	AAA	
AA+	Aa1	AA+	100
AA	Aa2	AA	
AA-	Aa3	AA-	
A+	A1	A+	
A	A2	А	40
A-	A3	A-	
BBB+	Baa1	BBB+	20
BBB	Baa2	BBB	19
BBB-	Baa3	BBB-	18
BB+	Ba1	BB+	17
BB	Ba2	BB	16
BB-	Ba3	BB-	15

- 2 Where based on the **Payment Record Sum**, a **User's Allowed Credit** at any time shall be calculated on the basis of 0.4% per 12 month period (escalating on an evenly graduated basis each month) of the **Unsecured Credit Cover**, subject to a maximum of 2% after 60 months of successive payment by the **Use of System Payment Date**.
- 3 Where based on the **Credit Assessment Sum**, a **User's Allowed Credit** at any given time shall be calculated as a percentage of the **Unsecured Credit Cover** by reference to the **Credit Assessment Score** as follows:

Credit Assessment Score	User's Allowed Credit as % of Unsecured Credit Cover
10	20
9	19
8	18
7	17
6	16
5	15
4	13.33
3	10
2	6.67
1	3.33

0

0

APPENDIX 2

Base Value At Risk

1. For each **Security Period**, the **HH Base Percentage** used in determining the **User's HH Base Value at Risk** shall be determined by reference to the following:

Security Period Start	Security Period End	HH Base
Date (inclusive)	Date (inclusive)	Percentage
1 st April	30 th June	-8.4%
1 st July	30 th September	-33.4%
1 st October	31 st December	-49.1%
1 st January	31 st March	7.0%
(2)	•	•

(a)

(b) For

2. For each **Security Period**, the **NHH Base Percentage** used in determining the **User's NHH Base Value at Risk** shall be determined by reference to the following:

Security Period Start Date (inclusive)	Security Period End Date (inclusive)	(c)NHH Base Percentage
1 st April	30 th June	(d)4.3%
1 st July	30 th September	(e)-1.5%
1 st October	31 st December	(f)-2.8%
1 st January	31 st March	(g)3.7%

Deemed HH Forecasting Performance and Revision

3. **Deemed HH Forecasting Performance**, *FPP_{HH}*, shall be calculated as set out in the following formula:

$$FPP_{HH} = \max\left(0, \frac{5}{1333} \sum_{m=8}^{12} \left(\frac{AA_{HH} - IA_{HH,m}}{AA_{HH}} * W_{HH,m}\right) - CA_{HH}\right)$$

Where:

- AA_{HH} is the Actual Amount of User's HH Charges for the previous Financial Year
- *IA_{HH,m}* is the **Indicative Annual HH TNUoS charge** calculated using the **Demand Forecast** used to determine **Transmission Network Use of System Demand Charges** made during month *m* of the previous **Financial Year**.

m	Invoice Month	Forecast weighting, <i>W_{HH,m}</i>
8	November	33.3
9	December	33.3
10	January	33.3
11	February	66.7
12	March	100

W_{HH,m,}	The forecast weighting to be applied for each month,	
<i>m</i> by reference to the following:		

 CA_{HH} , is an allowance for extreme conditions equal to 0.06.

- 4. The revised **Deemed HH Forecasting Performance,** shall be calculated on the basis of Paragraph 3 above, substituting the **Indicative Annual HH TNUoS Charge** for each month, *m* prior to the end of the **Reported Period of Increase** with the **Revised Indicative Annual HH TNUoS charge**, *RIA*_{HH,m}
- 5. The **Revised Indicative Annual HH TNUoS charge**, *RIA*_{HH,m} shall be derived as follows:

$$RIA_{HH,m} = \min\left(\max\left(\frac{DUA_{HH,p}}{DUB_{HH,p}} - \frac{DSA_{HH,p}}{DSB_{HH,p}}, 0\right) * RD_{HH,p} + IA_{HH,m}, IA_{HH,p}\right)$$

Where:

- $DUA_{HH,p}$ is the average half-hourly metered demand taken by the **User's Customers** during the period 17:00 to 17:30 on the twenty **Business Days** prior to the **Reported Period of Increase**, *p*, that do not fall between the two week period commencing 22nd December.
- $DUB_{HH,p}$ is the average half-hourly metered demand taken by the **User's Customers** during the period 17:00 to 17:30 on the twenty **Business Days** following the **Reported Period of Increase**, *p*, that do not fall between the two week period commencing 22nd December.

- *DSA_{HH,p}* is the average demand taken by **Total System Chargeable HH Demand** during the period 17:00 to 17:30 on the twenty **Business Days** prior to the **Reported Period of Increase,** *p*, that do not fall between the two week period commencing 22nd December.
- *DSB_{HH,p}* is the average demand taken by **Total System Chargeable HH Demand** during the period 17:00 to 17:30 on the twenty **Business Days** following the **Reported Period of Increase**, *p*, that do not fall between the two week period commencing 22nd December.
- *RD*_{*HH,p} is the forecast proportion of HH Charges remaining for the previous Financial Year from the first day of the month in which the Reported Period of Increase, <i>p* commences by reference to the following:</sub>

Month in which Reported Period of Increase commences	Remaining proportion of HH Charges
October	100%
November	100%
December	100%
January	66.7%
February	33.3%

- *IA_{HH,m}* is the **Indicative Annual HH TNUoS charge** calculated using the **Demand Forecast** used to determine **Transmission Network Use of System Demand Charges** made during month *m* of the previous **Financial Year**.
- *IA_{HH,p}* in the case that the the **Reported Period of Increase**, *p* ends prior to the 10th February of the previous **Financial Year**, is set equal to the **Indicative Annual HH TNUoS charge** calculated using the **Demand Forecast** used to determine **Transmission Network Use of System Demand Charges** made during the month immediately following **Reported Period of Increase** of the

previous Financial Year, otherwise is set to infinity.

Deemed NHH Forecasting Performance and Revision

6. **Deemed NHH Forecasting Performance**, *FPP_{NHH}*, shall be calculated as set out in the following formula:

$$FPP_{NHH} = \max\left(0, \frac{1}{300}\sum_{m=8}^{12} \left(\frac{AA_{NHH} - IA_{NHH,m}}{AA_{NHH}} * W_{NHH,m}\right) - CA_{NHH}\right)$$

Where:

- AA_{NHH} is the Actual Amount of User's NHH Charges for the previous Financial Year.
- *IA_{NHH,m}* is the **Indicative Annual NHH TNUoS charge** calculated using the **Demand Forecast** used to determine **Transmission Network Use of System Demand Charges** made during month *m* of the previous **Financial Year**.
- $W_{NHH,m}$, The forecast weighting to be applied for each month, *m* by reference to the following:

m	Invoice Month	Forecast weighting, <i>W_{NHH,m}</i>
8	November	41
9	December	49
10	January	59
11	February	70
12	March	81

 $CA_{NHH,}$ is an allowance for extreme conditions equal to 0.03.

- 7. The revised **Deemed NHH Forecasting Performance** shall be calculated on the basis of Paragraph 6 above, substituting the **Indicative Annual NHH TNUOS Charge** for each month, *m* prior to the end of the **Reported Period of Increase** with the **Revised Indicative Annual NHH TNUOS charge**, *RIA*_{NHH,m}.
- 8. The **Revised Indicative Annual NHH TNUoS charge**, *RIA*_{NHH,m} shall be derived as follows:

$$RIA_{NHH,m} = \min\left(\max\left(\frac{DUA_{NHH,p}}{DUB_{NHH,p}} - \frac{DSA_{NHH,p}}{DSB_{NHH,p}}, 0\right) * RD_{NHH,p} + IA_{NHH,m}, IA_{NHH,p}\right)$$

Where:

- *DUA*_{NHH,p} is the average non-half-hourly metered demand taken by the **User's Customers** during the period 16:00 to 19:00 on the twenty **Business Days** prior to the **Reported Period of Increase**, *p*, that do not fall between the two week period commencing 22nd December.
- $DUB_{NHH,p}$ is the average non-half-hourly metered demand taken by the **User's Customers** during the period 16:00 to 19:00 on the twenty **Business Days** following the **Reported Period of Increase**, *p*, that do not fall between the two week period commencing 22nd December.
- *DSA_{NHH,p}* is the average demand taken by **Total System Chargeable NHH Demand** during the period 16:00 to 19:00 on the twenty **Business Days** prior to the **Reported Period of Increase**, *p*, that do not fall between the two week period commencing 22nd December.
- *DSB*_{NHH,p} is the average demand taken by **Total System Chargeable NHH Demand** during the period 16:00 to 19:00 on the twenty **Business Days** following the **Reported Period of Increase**, *p*, that do not fall between the two week period commencing 22nd December.
- *RD*_{*NHH,p} is the forecast proportion of NHH Charges remaining for the previous Financial Year from the first day of the month in which the Reported Period of Increase, <i>p* commences by reference to the following:</sub>

Month in which Reported Period of Increase commences	Remaining proportion of NHH Charges
October	59%
November	51%
December	41%
January	30%
February	19%

- *IA_{NHH,m}* is the **Indicative Annual NHH TNUoS charge** calculated using the **Demand Forecast** used to determine **Transmission Network Use of System Demand Charges** made during month *m* of the previous **Financial Year**.
- *IA_{NHH,p}* in the case that the the **Reported Period of Increase**, *p* ends prior to the 10th February of the previous **Financial Year**, is set equal to the **Indicative Annual NHH TNUoS charge** calculated using the **Demand Forecast** used to determine **Transmission Network Use of System Demand Charges** made during the month immediately following **Reported Period of Increase** of the previous **Financial Year**, otherwise is set to infinity.

END OF SECTION 3

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APPENDIX 3

Ways of Using the GB Transmission System

References to "User" in this Appendix 3 shall be read as references to a User acting in the category of a Power Station directly connected to the GB Transmission System or an Embedded Power Station with a Bilateral Embedded Generation Agreement.

A **User** is entitled to **Use of System** at a **Node** up to its **LCN** and by means of the access products set out in Sections 2 to 11 in this Appendix 3.

For the avoidance of doubt, the payment provisions of Paragraph 6.6 of Section 6 of the **CUSC** shall apply to the products set out in this Appendix unless specified otherwise, in which case the payment provisions of this Appendix shall prevail.

1. LOCAL CAPACITY NOMINATION

1.1 Background

A User's LCN will be as set out in Appendix C of that User's Bilateral Connection Agreement or Bilateral Embedded Generation Agreement.

1.2 Characteristics of Local Capacity Nomination

- 1.2.1 A User's LCN shall never exceed that User's Connection Entry Capacity specified in that User's Bilateral Connection Agreement.
- 1.2.2 No Use of System without LCN

A User without an LCN shall not be entitled to apply for Use of System by means of any Short Term Access Products or apply for an Exchange Rate Request or Shared Access Capacity Rate Request and shall not be able to use the GB Transmission System prior to completion of any Transmission Connection Asset Works and LCN Transmission Reinforcement Works.

1.2.4 Prohibition to export above LCN

A User shall not request a Use of System access product under this Appendix 3, if such a product would result in a User's Access Capacity exceeding its LCN.

1.3 Users wishing to increase LCN after receipt of Operational Notification Each **User** shall be entitled to request an increase in its **LCN** for a **Node** up to, in the case of a **Power Station** directly connected to the **GB Transmission System**, a maximum of the **Connection Entry Capacity** for the **Node**, and such request shall be deemed to be a **Modification** for the purposes of the **CUSC** but with the words "as soon as practicable... not more than 3 months after" being read in the context of such **Modification** as being "within 28 days where practicable and in any event not more than 3 months (save where the **Authority** consents to a longer period) after".

1.4 Users wishing to decrease LCN after receipt of Operational Notification

- 1.4.1 Each User shall be entitled to decrease the LCN for the Node upon giving The Company not less than 5 Business Days notice in writing prior to 30 March in any Financial Year.
- 1.4.2 **The Company** shall as soon as practicable after receipt of such notice issue a revised Appendix C for the purposes of the relevant **Bilateral Agreement** or **Bilateral Embedded Generation Agreement** reflecting the decrease in the LCN.
- 1.4.3 The decrease in the **LCN** shall take effect on the first of April following receipt of the notice.

2. TRANSMISSION ENTRY CAPACITY (TEC)

2.1 Background

A User's Transmission Entry Capacity shall be as specified in Appendix C to the Bilateral Connection Agreement or Bilateral Embedded Generation Agreement as the case may be.

2.2 Decrease in Transmission Entry Capacity after receipt of Operational Notification

- 2.2.1 Each User shall be entitled to decrease the Transmission Entry Capacity for the Node upon giving The Company not less than 5 Business Days notice prior to 30 March in any Financial Year.
- 2.2.2 **The Company** shall as soon as practicable after receipt of such notice issue a revised Appendix C for the purposes of the relevant **Bilateral**

Agreement reflecting the decrease in the Transmission Entry Capacity.

2.2.3 The decrease in the **Transmission Entry Capacity** shall take effect on first April following receipt of the notice.

2.3 Increase in Transmission Entry Capacity after receipt of Operational Notification

Each User shall be entitled to request an increase in its Transmission Entry Capacity for a **Node** up to, in the case of a **Power Station** directly connected to the **GB Transmission System**, a maximum of the **Connection Entry Capacity** for the **Node** and such request shall be deemed to be a **Modification** for the purposes of the **CUSC** but with the words "as soon as practicable... not more than 3 months after" being read in the context of such **Modification** as being "within 28 days where practicable and in any event not more than 3 months (save where the **Authority** consents to a longer period) after".

2.4 Exchange Rate Requests Effective Post Operational Notification

- 2.4.1 **The Company** shall establish and maintain an **LCN/TEC Register** published on **The Company Website** recording the details set out in Paragraph 2.4.2 of this Appendix 3.
- 2.4.2 The LCN/TEC Register shall set out the name of the User, the Connection Site (or in the case of an Embedded Generator, site of connection), the Transmission Entry Capacity, the Local Capacity Nomination, the year of connection to (or in the case of an Embedded Generator the year of the use of) the GB Transmission System in respect of any Bilateral Agreements or agreements to change a User's Transmission Entry Capacity.
- 2.4.3 The details of the **Bilateral Agreement** or agreements to change a **User's Transmission Entry Capacity** and/or **LCN** shall be recorded on the **LCN/TEC Register** within 5 **Business Days** of the completion of such agreements.
- 2.4.4 Subject to the payment of the fee as outlined in the Charging Methodology Statements, The Company shall, after receipt of an Exchange Rate Request calculate the Exchange Rate as soon as practicable

but in any event not more than 3 months after such request is received.

- 2.4.5 In the event that the parties wish to proceed with a **TEC Trade** on the basis of the **Exchange Rate** then the **User** shall notify **The Company** and effective from the following 1 April, **The Company** shall revise the **Bilateral Agreements** (as appropriate) provided.
- 2.4.6 Any **TEC** transferred pursuant to a **TEC Trade** under this Paragraph 2.4 of Appendix 3 shall be transferred on a permanent basis.

3. SHORT TERM TRANSMISSION ENTRY CAPACITY

3.1 Background

- 3.1.1 A User, who is party to a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement may, make a STTEC Request to The Company in accordance with this Paragraph 3 of Appendix 3.
- 3.1.2 A User's Access Capacity for any part of the STTEC Period must not exceed its Local Capacity Nomination.

3.2 Form of STTEC Request

- 3.2.1 A STTEC Request must be received by The Company by the relevant date specified in Paragraph 3.6.5 of Appendix 3 of this Section 3 to the CUSC.
- 3.2.2 A STTEC Request must be made by way of email to be sent to the email address specified in the STTEC Request Form the and confirmed by fax and must attach the STTEC Request Form duly completed and signed on behalf of the User.
- 3.2.3 A STTEC Request shall not be deemed received by The Company until the non-refundable STTEC Request Fee has been paid to The Company and until the faxed copy of the STTEC Request is received in accordance with Paragraph 6.21.2.4 of the CUSC.
- 3.2.4 The STTEC Request must specify whether it is a Request for a STTEC Authorisation or an Application for a STTEC Offer.

- 3.2.5 Each **STTEC Request** must state one **STTEC Period** only.
- 3.2.6. A STTEC Request must be for a STTEC Period within a 12 month period of receipt by The Company of the STTEC Request and the STTEC Period must not include any days within more than one Financial Year. The STTEC Request must include the minimum and maximum level of MW for the STTEC Period.

3.3 Assessment by The Company of STTEC Requests

- 3.3.1 **The Company** may reject any **STTEC Request** that is not made in accordance with the provisions of this Paragraph 3 of this Appendix 3.
- 3.3.2 **The Company** will assess **STTEC Requests** and whether or not to make a **STTEC Offer** at its absolute discretion.
- 3.3.3 **The Company** will start assessing a **STTEC Request** no later than the relevant date specified in Paragraph 3.6.5 of this Appendix 3.
- 3.3.4 If **The Company** has received more than one **STTEC Request** for a **STTEC Period** with the same start date, **The Company** will:
 - (i) assess any **Requests for a STTEC** Authorisation before assessing any Applications for a STTEC Offer;
 - (ii) assess Requests for a STTEC Authorisation on a first come first served basis such that the Request for a STTEC Authorisation received earliest in time by The Company (as recorded by The Company) will be assessed first and then the Request for a STTEC Authorisation received next in time after that, and so on;
 - (iii) assess Applications for a STTEC Offer on a first come first served basis such that the Application for a STTEC Offer received earliest in time by The Company (as recorded by The Company) will be assessed first and then the Application for a STTEC Offer received next in time after that, and so on.

3.3.5 No priority will be given to any **Users** who have previously made successful **STTEC Requests** or **LDTEC Requests**.

3.4 Notification by The Company

- 3.4.1 Each **User** confirms and agrees that **The Company** shall have no liability to it for any **STTEC Request** in respect of which **The Company** makes no **STTEC Offer** in accordance with this Paragraph 3 of Appendix 3.
- 3.4.2 **The Company** is not obliged to make a **STTEC Offer** is respect of any **STTEC Request** submitted.
- 3.4.3 A STTEC Offer will only be made with respect to a STTEC Request at a level within the maximum and minimum range in MW submitted by the User.
- 3.4.4 **STTEC Offers** will be made for a uniform amount of MW for the **STTEC Period**.
- 3.4.5 No STTEC Offer will be made if the maximum figure in the STTEC Request would together with the User's Transmission Entry Capacity (plus any Short Term Access Product or Entry Overrun previously offered for any part of the STTEC Period) exceeds the total station Local Capacity Nomination.
- 3.4.6 **The Company** shall notify a **User** who has made a **STTEC Request** by no later than the relevant date referred to at Paragraph 3.6.6 of this Appendix 3, whether or not **The Company** makes a **STTEC Offer** in response to the **User's STTEC Request**.

3.5 Charging, Invoicing and Payment

- 3.5.1 Each **User** must pay the **STTEC Charge** even if the **User** does not use the corresponding **STTEC**.
- 3.5.2 The provisions of Section 3 of the **CUSC** shall apply in respect of the **STTEC Charge**.
- 3.5.3 The provisions of Section 6.6 of the **CUSC** shall apply in respect of payment of the **STTEC Charge**.

3.6 General

- Each Request for a STTEC Authorisation will 3.6.1 constitute an unconditional and irrevocable offer by the User to The Company to buy Short Term Capacity (on a station basis) up to the quantity (in whole MW) stated in the STTEC Request for the STTEC Period and at the relevant price per MW set out in the Statement of Use of System Charges and upon the terms and conditions of CUSC. A Request for a **STTEC Authorisation** is capable of being accepted by The Company. Notification by The Company that it has granted the **Request for a STTEC Authorisation** in accordance with Paragraph 3.4.6 of this Appendix 3 constitutes acceptance by The Company of the Request for a STTEC Authorisation. The notification of STTEC Authorisation will:-
 - state the level in MW (within the maximum and minimum range requested by the User) offered for the STTEC Period;
 - (ii) include a revised Appendix C to the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement (as appropriate) which will detail the STTEC and the STTEC Period for which this applies and The Company and the User agree that C to the relevant Bilateral Appendix Agreement will be deemed to be that notified in accordance with this Paragraph 3.6 of Appendix 3 for the **STTEC Period**, unless otherwise amended in accordance with such Bilateral Agreement or the CUSC. Upon expiry of the STTEC Period the provisions in Appendix C that relate to such **STTEC** for that **STTEC Period** shall cease to have effect:
 - (iii) state the **STTEC Charge**.
- 3.6.2 Each Application for a STTEC Offer is an application for the right to buy Short Term Capacity (on a station basis) up to the quantity (in whole MW) stated in the STTEC Request for the STTEC Period at the relevant price per MW set out in the Statement of Use System Charges and upon the terms and conditions of CUSC. Once an Application for a STTEC Offer has been received by The Company it cannot be withdrawn without the written consent of The Company. Notification by The Company that it has granted the Application for a STTEC Offer in accordance with

Paragraph 3.4.5 of this Appendix 3 will constitute a **STTEC Offer**.

- 3.6.3 A STTEC Offer shall:
 - state the level in MW of STTEC (within the maximum and minimum range requested by the User) offered for the STTEC Period;
 - (ii) include a revised Appendix C to the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement (as appropriate) which will detail the STTEC and the STTEC Period for which this applies and The Company and the User agree that, if the User accepts the STTEC Offer in accordance with Paragraph 3.6.4 of this Appendix 3, Appendix С to the relevant Bilateral Agreement will be deemed to be that notified in accordance with this Paragraph 3 of this Appendix 3 for the STTEC Period, unless otherwise amended in accordance with such Bilateral Agreement or the CUSC. Upon expiry of the **STTEC Period** the provisions in Appendix C that relate to such **STTEC** for that STTEC Period shall cease to have effect:
 - (iii) state the **STTEC Charge**.
 - (iv) be open for acceptance by the **User** within 24 hours of receipt of the faxed copy of the **STTEC Offer**.
- 3.6.4 A User may accept a STTEC Offer within 24 hours of receipt of the faxed copy of the STTEC Offer. Acceptance of a STTEC Offer shall be made by the User executing and faxing back the Appendix C sent to the User as part of the STTEC Offer. A STTEC Offer lapses if not accepted within such period.
- 3.6.5 The dates referred to at Paragraphs 3.2.1 and 3.3.3 of this Appendix 3 are:-
 - (i) in the case of a **Request for a STTEC Authorisation**, six weeks before the start date for the **STTEC Period**; and

- (ii) in the case of an Application for a STTEC Offer, two weeks before the start date for the STTEC Period.
- 3.6.6 The date referred to at Paragraph 3.4.6 of this Appendix 3 is:-
 - (i) in the case of a Request for a STTEC Authorisation, four weeks before the start date for the STTEC Period;
 - (ii) in the case of an **Application for a STTEC Offer**, seven days before the start date for the **STTEC Period**.
- 3.6.7 **The Company** may publish the following information in respect of **STTEC Authorisations**, and **STTEC Offers** which are accepted:-
 - 1. details of the **STTEC Period**;
 - 2. maximum and minimum amount in MW requested;
 - 3. identity of the **User**;
 - 4. the **Connection Site** or site of **Connection**,

in such form and manner as shall be prescribed by **The Company** from time to time.

- 3.6.8 **The Company** may publish the following information in respect of **Requests for a STTEC Authorisation** and **Applications for a STTEC Offer** which in either case are not granted and **STTEC Offers** which are not accepted:-
 - 1. details of the **STTEC Period**;
 - 2. maximum and minimum amount in MW requested,

in such form and manner as shall be prescribed by **The Company** from time to time.

3.6.9 The **User** consents to the publication by **The Company** of the information referred to above.

4 LIMITED DURATION TRANSMISSION ENTRY CAPACITY

4.1 Background

- 4.1.1 A User, who is party to a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement may make an LDTEC Request to The Company in accordance with this Paragraph of this Appendix 3.
- 4.1.2 A User's Access Capacity for any part of the LDTEC Period must not exceed its Local Capacity Nomination.

4.2 Form of LDTEC Request

- 4.2.1 An LDTEC Request must be received by The Company no later than:
 - in cases where the requested LDTEC Period is
 9 months or exceeds 9 months, 7 weeks and
 one Business Day before the start date for the
 LDTEC Period;
 - (ii) in cases where the requested LDTEC Period is
 6 months or exceeds 6 months but is less than
 9 months, 5 weeks and one Business Day
 before the start date for the LDTEC Period;
 - (iii) in cases where the requested LDTEC Period is 3 months or exceeds 3 months but is less than 6 months, 4 weeks and one Business Day before the start date for the LDTEC Period;
 - (iv) in cases where the requested LDTEC Period is less than 3 months, 3 weeks and one Business Day before the start date for the LDTEC Period.
- 4.2.2 An LDTEC Request must be made by way of email to be sent to the email address specified in the LDTEC Request Form and confirmed by fax and must attach the LDTEC Request Form duly completed and signed on behalf of the User.
- 4.2.3. An LDTEC Request shall not be deemed received by The Company until the LDTEC Request Fee has been paid to The Company and until the faxed copy of the LDTEC Request is received in accordance with Paragraph 4.2.2 of this Appendix 3.

- 4.2.4 Each LDTEC Request must state whether it is for an LDTEC Block Offer only, an LDTEC Indicative Block Offer only or for both an LDTEC Block Offer and an LDTEC Indicative Block Offer and must specify one LDTEC Period only.
- 4.2.5. An LDTEC Request cannot be made prior to the start of the Financial Year to which it relates. The LDTEC Request must state the LDTEC Period and include the minimum and maximum level of MW for the LDTEC Period which, for the avoidance of doubt, must be the same for any LDTEC Block Offer and LDTEC Indicative Block Offer in the same LDTEC Request.

4.3 Assessment by The Company of LDTEC Requests

- 4.3.1 **The Company** may reject any **LDTEC Request** that is not made in accordance with the provisions of this Paragraph 4 of this Appendix 3.
- 4.3.2 **The Company** will assess **LDTEC Requests** and whether or not to make an **LDTEC Offer** at its absolute discretion.
- 4.3.3 Subject to Paragraphs 4.3.4 and 4.3.5 of this Appendix
 3, The Company will start assessing an LDTEC
 Request no later than:
 - (i) in cases where the requested LDTEC Period is 9 months or exceeds 9 months, 7 weeks and one Business Day before the start date for the LDTEC Period;
 - (ii) in cases where the requested LDTEC Period is
 6 months or exceeds 6 months but is less than
 9 months, 5 weeks and one Business Day
 before the start date for the LDTEC Period;
 - (iii) in cases where the requested LDTEC Period is 3 months or exceeds 3 months but is less than 6 months, 4 weeks and one Business Day before the start date for the LDTEC Period;
 - (iv) in cases where the requested LDTEC Period is less than 3 months, 3 weeks and one Business Day before the start date for the LDTEC Period.

- 4.3.4 If **The Company** receives more than one **LDTEC Request** for an **LDTEC Period** or a request for a **Short Term Access Product** or a **TEC Increase Request** which **The Company** believes will impact on each other, **The Company** will assess such requests and the capacity available on the **GB Transmission System** on a first come first served basis such that the request received earliest in time by **The Company** (as recorded by **The Company**) will be considered first in terms of capacity available and then the request received next in time after that, and so on.
- 4.3.5 Where Paragraph 4.3.4 of this Appendix 3 applies and the **TEC Increase Request** was received before the **LDTEC Request The Company** shall be entitled to suspend the assessment and making of the **LDTEC Offer** in respect of such **LDTEC Request** as necessary to enable it to make an offer in respect of the **TEC Increase Request.**
- 4.3.6 Where the circumstances in Paragraph 4.3.5 of this Appendix 3 apply **The Company** shall as soon as practicable advise the **User** of such suspension giving an indication of the timescale for the **LDTEC Offer**. The **User** shall be entitled to withdraw its **LDTEC Request** in such circumstances.
- 4.3.7 No priority will be given to any **Users** who have previously made successful requests for **Short Term Access Products**.

4.4 Notification by The Company

- 4.4.1 Each User confirms and agrees that The Company shall have no liability to it for any LDTEC Offer which The Company does not make in respect of an LDTEC Request in accordance with this Paragraph 4.4 of this Appendix 3.
- 4.4.2 **The Company** is not obliged to make an **LDTEC Offer** in respect of any **LDTEC Request** submitted.
- 4.4.3 An **LDTEC Offer** will only be made within the maximum and minimum range in MW submitted by the **User**.
- 4.4.4 The Company shall no later than seven days and one Business Day before the start date for the LDTEC Period, either make an LDTEC Offer in response to the User's LDTEC Request or notify such User that it

does not intend to make an LDTEC Offer in respect of the LDTEC Request.

4.5 Charging, Invoicing and Payment

- 4.5.1 Each **User** must pay the **LDTEC Charge** even if the **User** does not use the corresponding **LDTEC**.
- 4.5.2 The provisions of Section 3 of the **CUSC** shall apply in respect of the **LDTEC Charge**.
- 4.5.3 The provisions of Section 6.6 of the **CUSC** shall apply in respect of payment of the **LDTEC Charge**.

4.6 LDTEC Offers

- 4.6.1 An **LDTEC Block Offer** shall:
 - (i) state the LDTEC Profile ;
 - (ii) include a revised Appendix C to the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement (as appropriate) which will detail the LDTEC Profile and the LDTEC Period for which this applies; and
 - (iii) be open for acceptance by the **User** within one **Business Day** of receipt of the faxed copy of the **LDTEC Offer**.
- 4.6.2 An LDTEC Indicative Block Offer shall:
 - (i) state the **LDTEC Indicative Profile**;
 - (ii) include a revised Appendix C to the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement (as appropriate) which will detail the LDTEC Indicative Profile and the LDTEC Period for which this applies;
 - (iii) state the Available LDTEC for the first seven LDTEC Weeks within the LDTEC Indicative Profile; and
 - (iv) be open for acceptance by the **User** within one **Business Day** of receipt of the faxed copy of the **LDTEC Offer**.

- 4.6.3 Where the LDTEC Offer comprises both an LDTEC Block Offer and an LDTEC Indicative Block Offer a User may only accept one or the other but not both.
- 4.6.4 A User may accept an LDTEC Block Offer within one Business Day of receipt of the faxed copy of the LDTEC Block Offer. Acceptance of an LDTEC Block Offer shall be made by the User executing and faxing back the accepted LDTEC Block Offer in which the User shall have either confirmed acceptance of the LDTEC Profile in full or confirmed acceptance of the LDTEC Profile with a cap throughout the profile at a specific MW figure (not exceeding the maximum MW figure in the LDTEC Profile). An LDTEC Block Offer lapses if not accepted within such period.
- 4.6.5 A User may accept an LDTEC Indicative Block Offer within one Business Day of receipt of the faxed copy of the LDTEC Indicative Block Offer. Acceptance of an LDTEC Indicative Block Offer shall be made by the User accepting the LDTEC Indicative Block Offer in which the User shall have completed the Requested LDTEC figure in MW (which figure shall not exceed the maximum level of MW in the LDTEC Request). An LDTEC Indicative Block Offer lapses if not accepted within such period.

Notification of weekly available LDTEC

- 4.6.6 Where **The Company** has made an **LDTEC indicative Block Offer** to a **User** and this has been accepted in accordance with Paragraph 4.6.5 of this Appendix 3 **The Company** will by 17.00 on the Friday prior to the eighth **LDTEC Week** and each subsequent Friday during the **LDTEC Period** send to the **User** by email an **LDTEC Availability Notification** which will state the **Available LDTEC** up to the **Requested LDTEC** for the **LDTEC Week** eight weeks ahead.
- 4.6.7 If the User accepts the LDTEC Offer made in accordance with Paragraph 4.6.4 or 4.6.5 of this Appendix 3, for the LDTEC Period Appendix C to the relevant Bilateral Agreement will be that accepted by the User in accordance with Paragraph 4.6.4 or 4.6.5 of this Appendix 3 as appropriate unless otherwise subsequently amended in accordance with such Bilateral Agreement or the CUSC. Upon expiry of the

LDTEC Period such Appendix C as it relates to that **LDTEC** shall cease to have effect.

4.7 LDTEC reporting provisions

- 4.7.1 **The Company** may publish the following information in respect of **LDTEC Requests** which are accepted:-
 - 1. details of the **LDTEC Period**;
 - 2. maximum and minimum amount in MW requested;
 - 3. identity of the **User**;
 - 4. the **Connection Site** or site of **Connection**,

in such form and manner as shall be prescribed by **The Company** from time to time.

- 4.7.2 **The Company** may publish the following information in respect of **LDTEC Requests** which in either case are not withdrawn and for which no **LDTEC Offers** are made and **LDTEC Offers** which are not accepted:-
 - 1. details of the **LDTEC Period**;
 - 2. maximum and minimum amount in MW requested,

in such form and manner as shall be prescribed by **The Company** from time to time.

4.7.3 The **User** consents to the publication by **The Company** of the information referred to above.

5. COMMERCIAL LIMITED DURATION TRANSMISSION ENTRY CAPACITY

5.1 Background

5.1.1 A User, who is party to a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement, may make a CLDTEC Request to The Company in accordance with this Paragraph of Appendix 3. 5.1.2 A User's Access Capacity for any part of the CLDTEC Period must not exceed its Local Capacity Nomination.

5.2 Form of CLDTEC Request

- 5.2.1 A CLDTEC Request must be received by The Company no later than:
 - (i) in cases where the requested CLDTEC Period exceeds 9 months, 9 weeks and one Business Day before the start date for the CLDTEC Period;
 - (ii) in cases where the requested CLDTEC Period is 6 months or exceeds 6 months but does not exceed 9 months, 6 weeks and one Business Day before the start date for the CLDTEC Period;
 - (iii) in cases where the requested **CLDTEC Period** is less than 6 months, 5 weeks and one **Business Day** before the start date for the **CLDTEC Period.**
- 5.2.2 A CLDTEC Request must be made by way of email to be sent to the email address specified in the CLDTEC Request Form and confirmed by fax and must attach the CLDTEC Request Form duly completed and signed on behalf of the User.
- 5.2.3. A CLDTEC Request shall not be deemed received by The Company until the CLDTEC Request Fee has been paid to The Company and until the faxed copy of the CLDTEC Request is received in accordance with Paragraph 5.2.2 of this Appendix 3.
- 5.2.4. A CLDTEC Request may not be made before the start of the Financial Year to which it relates. The CLDTEC Request must state the CLDTEC Period in consecutive weeks, include the minimum and maximum level of MW for the CLDTEC Period, and the maximum price which the User is willing to pay for each week of the CLDTEC Period.

5.3 Assessment by The Company of CLDTEC Requests

<u>Circumstances where CLDTEC Requests may be</u> rejected or accepted CLDTEC Offers withdrawn

- 5.3.1 The Company may reject any CLDTEC Request that is not made in accordance with the provisions of this Paragraph 5 of Appendix 3, including where the User fails to provide The Company with Security Cover in accordance with the provisions of CUSC Paragraph 3.21 or where the User has a past history of defaulting on its payment or security obligations under the CUSC.
- 5.3.2 In the event that the **User** is during the **CLDTEC Period** in breach of its obligations to provide **The Company** with **Security Cover** in accordance with the provisions of **CUSC** Paragraph 3.21 then **The Company** may revoke the **CLDTEC Offer** and as a consequence the **User's** rights to use the **GB Transmission System** pursuant to this until such time as the breach is remedied.
 - General provisions on assessment of CLDTEC Requests
- 5.3.3 **The Company** will assess **CLDTEC Requests** and whether or not to make a **CLDTEC Offer** at its absolute discretion, applying the provisions of this Paragraph 5 of Appendix 3 and the **SO ST Release Methodology**.
- 5.3.4 Subject to Paragraphs 5.3.5 and 5.3.6 of this Appendix
 3, The Company will start assessing a CLDTEC
 Request no later than:
 - in cases where the requested CLDTEC Period exceeds 9 months, 9 weeks and one Business Day before the start date for the CLDTEC Period;
 - (ii) in cases where the requested **CLDTEC Period** exceeds 6 months but does not exceed 9 months, 6 weeks and one **Business Day** before the start date for the **CLDTEC Period**;
 - (iii) in cases where the requested **CLDTEC Period** is less than 6 months, 5 weeks and one **Business Day** before the start date for the **CLDTEC Period.**
- 5.3.5 If The Company receives more than one CLDTEC Request for a CLDTEC Period or another request for a Short Term Access Product or a TEC Increase Request which The Company believes will impact on

one another, **The Company** will assess such requests and the capacity available on the **GB Transmission System** on a first come first served basis such that the request received earliest in time by **The Company** (as recorded by **The Company**) will be considered first in terms of capacity available and then the request received next in time after that, and so on.

5.3.6 No priority will be given to any **Users** who have previously made successful requests for **Short Term Access Products** as a result of those requests.

5.4 Notification by The Company

- 5.4.1 Each **User** confirms and agrees that **The Company** shall have no liability to it for any **CLDTEC Offers** which **The Company** does not make in respect of a **CLDTEC Request** in accordance with this Paragraph 5.4 of this Appendix 3.
- 5.4.2 **The Company** is not obliged to make a **CLDTEC Offer** in respect of any **CLDTEC Request** submitted.
- 5.4.3 A CLDTEC Offer will only be made at zero or within the maximum and minimum range in MW submitted by the User.
- 5.4.4 **The Company** shall no later than seven days and one **Business Day** before the start date for the **CLDTEC Period**, either make a **CLDTEC Offer** in response to the **User's CLDTEC Request** or notify such **User** that it does not intend to make a **CLDTEC Offer**.

5.5 Charging, Invoicing, Payment and Security Cover

- 5.5.1 Each User having been made and accepted a CLDTEC Offer shall be liable to pay the CLDTEC Charge even if the User does not use the corresponding CLDTEC.
- 5.5.2 The provisions of Section 6.6 of the CUSC shall apply in respect of payment of the CLDTEC Charge subject to the following requirements:
 - (a) Where the CLDTEC Period is more than 1 calendar month the CLDTEC Charge shall be divided into equal monthly instalments; and

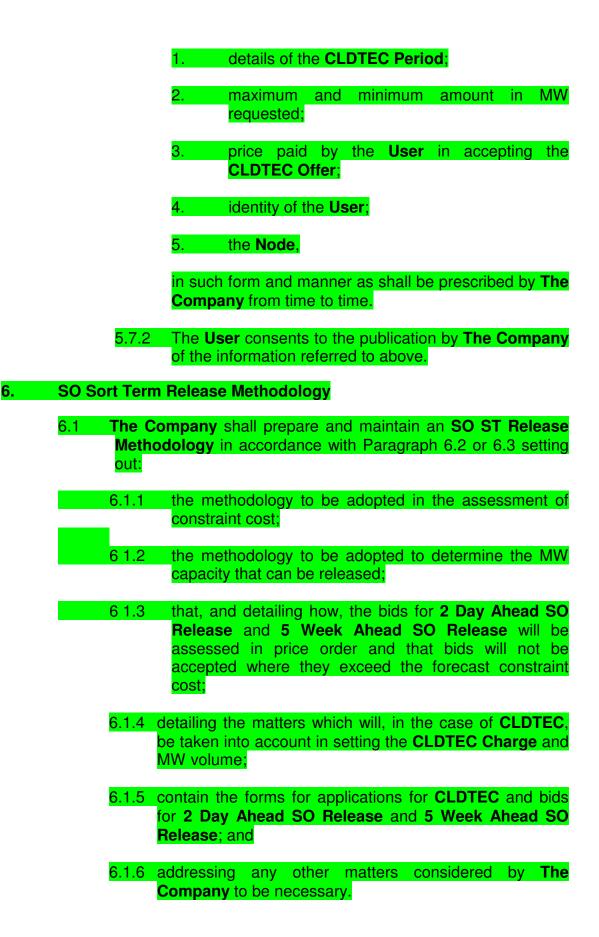
- (b) **The Company** shall invoice the **User** for each instalment of the **CLDTEC Charge** on the first day of each month to which the **CLDTEC Period** applies and the **User** shall pay the **CLDTEC Charge** on the 15th day of that same month.
- 5.5.3 For the purposes of Paragraph 3.22 of Section 3, and unless arrangements have been made pursuant to **CUSC** Paragraph 6.6.5, the **User's Security Requirement** for the duration of the **CLDTEC Period** shall be determined as:
 - (a) the CLDTEC Charge payable by the User for each month security for such CLDTEC Charge to be in place by the Business Day prior to the start of that month for the period of the 1st until the 15th day of that month inclusive.

5.6 CLDTEC Offers

- 5.6.1 A CLDTEC Offer shall:
 - (i) state the CLDTEC Profile and CLDTEC Charge ; and
 - (ii) include a revised Appendix C to the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement (as appropriate) which will detail the CLDTEC Profile and the CLDTEC Period for which this applies;
 - (iii) be open for acceptance by the **User** within one **Business Day** of receipt of the faxed copy of the **CLDTEC Offer**.
- 5.6.2 A User may accept a CLDTEC Offer within one Business Day of receipt of the faxed copy of the CLDTEC Offer. Acceptance of a CLDTEC Offer shall be made by the User executing and faxing back the accepted CLDTEC Offer. A CLDTEC Offer lapses if not accepted within such period.

5.7 CLDTEC reporting provisions

5.7.1 **The Company** may publish the following information in respect of **CLDTEC Requests** which are accepted or not accepted:-



- 6.2 Within 3 months of CUSC Amendment Proposal 161 becoming an Approved Amendment The Company shall make an Amendment Proposal to provide for the SO ST Release Methodology and for it to be incorporated within the CUSC.
- 6.3 In the event that such Amendment Proposal or any Alternative Amendment is not approved The Company shall prior to the Implementation Date for CUSC Amendment Proposal 161:
 - 6.3.1 prepare a draft of the SO ST Release Methodology and publish it on The Company's website for a period of 28 days for CUSC Parties to provide comments to The Company.]
 - 6.3.2 Following this 28 day period of consultation, **The Company** shall publish the final **SO ST Release Methodology** on **The Company** website.
 - 6.3.3 **The Company** shall review the **SO ST Release Methodology** annually and assess whether any amendments are required. If **The Company's** view is that no amendments are required **The Company** shall publish its view on **The Company** website.
 - 6.3.4 If in **The Company's** view amendments are required to the **SO ST Release Methodology** such amendment will be undertaken in accordance with the process in Paragraph 6.3.1 to 6.3.3 of this Appendix 3.

7. 2 Day Ahead SO Release

7.1 Background

- 7.1.1 The Company shall hold a 2 Day Ahead SO Release Auction on the days and in accordance with the principles set out in the SO ST Release Methodology.
- 7.1.2 A User, who is party to a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement, may apply for 2 Day Ahead SO Release in accordance with the procedures set out in this Paragraph 7 of Appendix 3.
- 7.1.3 A User's Access Capacity for any part of the period for which a User applies for 2 Day Ahead SO Release must not exceed its Local Capacity Nomination.
- 7.1.4 Each **2 Day Ahead SO Release Bid Form** will constitute an unconditional and irrevocable offer by the **User** to **The Company** up to the quantity (in whole

MW) and at the price per MW set out in the **2 Day Ahead SO Release Bid Form**.

7.2 Form of 2 Day Ahead SO Release Auction

7.2.1 Submission of Bid

- (a) Users wishing to apply for 2 Day Ahead SO Release shall complete the 2 Day Ahead SO Release Bid Form and submit it, duly completed and signed by an authorised representative of the User, to The Company by Close of Bids by:
 - submitting by email the electronic version of the 2 Day Ahead SO
 Release Bid Form to the email address specified in the 2 Day Ahead
 SO Release Bid Form; and
 - (ii) submitting by fax a hard copy of the 2 Day Ahead SO Release Bid Form.
- (b) In the event of any conflict between bids in the emailed **2 Day Ahead SO Release Bid Form** and the faxed copy the faxed copy will prevail.
- (c) Either the electronic or the hard copy of a 2 Day Ahead SO Release Bid Form must be received by The Company before Close of Bids for the bid to be valid. If neither the electronic nor hard copy bid forms are received by Close of Bids then the bids will be rejected in their entirety.
- (d) All 2 Day Ahead SO Release Bid Forms submitted under this paragraph must be unqualified and unconditional and may not be withdrawn after Close of Bids.
- (e) It is a condition of any application for 2 Day Ahead SO Release where the User specifies a Buy Back Price that prior to submitting such application a User has entered into a SO Release Transmission Related Agreement with The Company.

7.2.2 Content of Bid

A User wishing to submit a **2 Day Ahead SO Release Bid Form** pursuant to Paragraph 7.2.1 of this Appendix

3 shall ensure that	at it submits the following informatic	<mark>n n</mark>
as part of its 2 Da y	y Ahead SO Release Bid Form:	

	(a)	the id	entity	y of th	ie Usei	;				
	(b)		emer	nt or E	levant l Embed			onnect ation	ion	
	(c)	for by	the	User,	such p	period	starti	riod be ng at 0 9 am o	5.00	
	(d)	detail is ma		he N a	ode in r	relatio	n to v	vhich th	<mark>e bic</mark>	ł
	(e)			•				y minin y the U		
	(f)				N at wł d SO R			<mark>er</mark> is bio d	dding	1
	(g)	Parag	graph	n <mark>7.2</mark> .1	l(e) of t	this Ap	openc	and sub lix 3, it (Price)	may	
	(h)				mation ease Mo		-	specifi /.	<mark>ed in</mark>	
7.2.3	Assess Capacit		by	The	Comp	any	and	Allocat	tion	of

7.2.3.1 The Company shall assess any bids submitted by a User pursuant to Paragraphs 7.2.1 and 7.2.2 of this Appendix 3 in accordance with the criteria set out in the SO ST Release Methodology and shall reject any 2 Day Ahead SO Release Bid Forms not made in accordance with the provisions of this Paragraph 7 of Appendix 3 and, where relevant, the SO ST Release Methodology including where the User fails to provide The Company with Security Cover in accordance with the provisions of CUSC Paragraph 3.21 or where the **User** has a past history of defaulting on its payment or security obligations under the CUSC.

7.2.3.2 In the event that the User is during the 2 Day Ahead SO Release Period in breach of its obligations to provide The Company with Security Cover in accordance with the provisions of CUSC Paragraph 3.21 then The Company may revoke the 2 Day SO Release Acceptance and as a consequence the User's rights to use the GB Transmission System pursuant to this until such time as the breach is remedied.

7.2.4 Notification by The Company

- (a) Each User confirms and agrees that The Company shall have no liability to it for any 2 Day Ahead SO Release Acceptance which The Company does not make, in respect of a submitted 2 Day Ahead SO Release Bid Form in accordance with this Paragraph 7.2.4 of this Appendix 3.
- (b) The Company is not obliged to make a 2 Day Ahead SO Release Acceptance in respect of any 2 Day Ahead SO Release Bid Form submitted.
- (c) A 2 Day Ahead SO Release Acceptance will only be made at the price bid for by the User and at or above the minimum volume in MW submitted by the User.
- (d) The Company shall, no later than by 22.30 hours on the day that a User has submitted a 2 Day Ahead SO Release Bid Form in accordance with Paragraph 7.2.1 of this Appendix 3, either issue a 2 Day Ahead SO Release Acceptance (which will specify the volume (in whole MW) awarded to the User and price) or notify such User that it does not intend to issue a 2 Day Ahead SO Release Acceptance.
- 7.2.5 Charging, Invoicing, Payment and Security

Payment Provisions

(a) Where a 2 Day Ahead SO Release Acceptance has been issued to a User, the User shall be liable to pay the 2 Day Ahead SO Release Charge as follows:

- (i) Payment shall be due 29 days after the SO Release Day which is the subject of the 2 Day Ahead SO Release Acceptance.
- (ii) The Company shall invoice Users on the first or fifteenth day of the month as applicable for any SO Release Days not previously invoiced, or where such days are not Business Days, on the first Business Day following the first or fifteenth day of the month as applicable and payment shall be due on or before the date specified in the said invoice.
- (b) The provisions of Paragraph 6.6 of Section 6 of the **CUSC** shall apply in all other respects to this Paragraph 7 of this Appendix 3, subject to this section prevailing in the case of any inconsistencies.

Security Requirement

(c) For the purposes of Paragraph 3.22 of Section 3, where a 2 Day Ahead SO Release Acceptance has been issued to a User, and unless arrangements have been made pursuant to CUSC Paragraph 6.6.5, the User's Security Requirement shall be determined as the 2 Day Ahead SO Release Charge payable in respect of the 2 Day Ahead SO Release Period bid for by the User security for such to be in place by the Business Day prior to the start of that 2 Day Ahead SO Release Period until the day 29 days after the start of the 2 Day Ahead SO Release Period

7.3 **Post-allocation information**

- 7.3.1 Following each 2 Day Ahead SO Release Auction, The Company shall within 1 hour of Close of Bids publish the following information in respect of each Node:
 - details of each 2 Day Ahead SO Release Bids where a 2 Day Ahead SO Release Acceptance has been issued;

 details of each 2 Day Ahead SO Release Acceptance issued;

 details of each 2 Day Ahead SO Release Bid where a 2 Day Ahead SO Release Acceptance has not been issued,

in such form and manner as shall be prescribed by **The Company** from time to time.

7.3.2 The **User** consents to the publication by **The Company** of the information referred to above.

7.4 Buy Back Price

- 7.4.1 Where a **2 Day Ahead SO Release Acceptance** has been issued in respect of a **2 Day Ahead SO Release Bid** with a **Buy Back Price**:
 - 7.4.1.1. During the 2 Day Ahead SO Release Period the User shall not, in respect of the MW that are the subject of the 2 Day Ahead SO Release, submit into the Balancing Mechanism a Bid Price less than the Buy Back Price; and
 - 7.4.1.2. In the event that the **User** does not comply with the provisions of Paragraph 7.4.1.1 above then the provisions of the **SO Release Transmission Related Agreement** shall apply.

8. 5 WEEK AHEAD SO RELEASE

8.1 Background

- 8.1.1 The Company shall hold a 5 Week Ahead SO Release Auction on the days and in accordance with the principles set out in the SO ST Release Methodology.
- 8.1.2 A User, who is party to a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement, may apply for 5 Week Ahead SO Release in accordance with the auction procedures set out in this Paragraph 8 of this Appendix 3.

- 8.1.3 A User' s Access Capacity for any part of the period for which a User applies for 5 Week Ahead SO Release must not exceed its Local Capacity Nomination.
- 8.1.4 Each 5 Week Ahead SO Release Bid Form will constitute an unconditional and irrevocable offer by the User to The Company up to the quantity (in whole MW) and at the price per MW set out in the 5 Week Ahead SO Release Bid Form.

8.2 Form of 5 Week Ahead SO Release Auction

8.2.1 Submission of Bid

- (a) Users wishing to apply for 5 Week Ahead SO Release shall complete the 5 Week Ahead SO Release Bid Form and submit it, duly completed and signed by an authorised representative of the User, to The Company by Close of Bids by:
 - submitting by email the electronic version of the 5 Week Ahead SO
 Release Bid Form to the email address specified in the 5 Week Ahead
 SO Release Bid Form; and
 - (ii) submitting by fax a hard copy of the **5** Week Ahead SO Release Bid Form.
- (b) In the event of any conflict between bids in the emailed **5 Week Ahead SO Release Bid Form** and the faxed copy the faxed copy will prevail.
- (c) Either the electronic or the hard copy of a 5 Week Ahead SO Release Bid Form must be received by The Company before Close of Bids for the bid to be valid. If neither the electronic nor hard copy bid forms are received by Close of Bids then the bids will be rejected in their entirety.
- (d) All **5 Week Ahead SO Release Bid Form** submitted under this paragraph must be unqualified and unconditional and may not be withdrawn after **Close of Bids**.
- (e) It is a condition of any application for 5 Week Ahead SO Release where the User specifies a Buy Back Price that prior to submitting such

application a **User** has entered into a **SO** Release Transmission Related Agreement with The Company.

8.2.2 Content of Bid

A User wishing to submit a **5 Week Ahead SO Release Bid Form** pursuant to Paragraph 8.2.1 of this Appendix 3 shall ensure that it submits the following information as part of its **5 Week Ahead SO Release Bid Form**:

- (a) the identity of the **User**;
- (b) details of the relevant Bilateral Connection Agreement or Embedded Generation Agreement;
 (c) the 5 Week Ahead SO Release Period being bid for by the User, such period starting at 05.00 am on the Monday of Week 6 and finishing at 04.49 am on the Monday of Week 7;
- (d) details of the **Node** in relation to which the bid is made;
- (e) the price per MW at which the **User** is bidding for **5 Week Ahead SO Release**; and
- (f) the volume (in whole MW) and any minimum volume of capacity being bid for by the User; and
- (g) where the User wishes to do so, and subject to Paragraph 8.2.1(e) of this Appendix 3, it may also include the User's Buy Back Price; and
- (h) such other information as may be specified in the **SO ST Release Methodology**.

8.2.3 Assessment by The Company and Allocation of Capacity

> 8.2.3.1 **The Company** shall assess any bids submitted by a **User** pursuant to Paragraphs 8.2.1 and 8.2.2 of this Appendix 3 in accordance with the criteria set out in the **SO ST Release Methodology** and shall reject any **5 Week**

Ahead SO Release Bid Forms not made in accordance with the requirements of this Paragraph 8 of Appendix 3 and, where relevant, the SO ST Release Methodology including where the User fails to provide The Company with Security Cover in accordance with the provisions of CUSC Paragraph 3.21 or where the User has a past history of defaulting on its payment or security obligations under the CUSC.

8.2.3.2 In the event that the **User** is during the **5 Week SO Release Period** in breach of its obligations to provide **The Company** with **Security Cover** in accordance with the provisions of **CUSC** Paragraph 3.21 then **The Company** may revoke the **5 Week SO Release Acceptance** and as a consequence the **User's** rights to use the **GB Transmission System** pursuant to this until such time as the breach is remedied.

8.2.4 Notification by The Company

- (a) Each User confirms and agrees that The Company shall have no liability to it for any 5 Week Ahead SO Release Acceptance which The Company does not issue in respect of a submitted 5 Week Ahead SO Release Bid Form in accordance with this Paragraph 8.2.4 of this Appendix 3.
- (b) The Company is not obliged to issue a 5 Week Ahead SO Release Offer in respect of any 5 Week Ahead SO Release Bid Form submitted.
- (c) A 5 Week Ahead SO Release Acceptance will only be issued at the price bid for by the User and within the maximum and minimum range in MW submitted by the User.
- (d) The Company shall, no later than by 16.00 hours on the Wednesday of the week following the week in which a User has submitted a 5 Week Ahead SO Release Bid Form in accordance with Paragraph 8.2.1 of this Appendix 3 (Week 2), either issue a 5 Week Ahead SO Release Acceptance (which will specify the volume awarded to the User) or

notify such **User** that it does not intend to issue a **5 Week Ahead SO Release Acceptance**.

(e) Where **Close of Bids** occurred on the first **Business Day** following a Wednesday that was a Christmas Day, Boxing Day or New Year's Day, **The Company** shall comply with the notification requirements set out in Paragraph 8.2.4(d) of this Appendix 3 by 16.00 hours on the day that is 7 days from the day on which **Close of Bids** occurred.

8.2.5 Charging, Invoicing and Payment

Payment Provisions

- (a) Where a 5 Week Ahead SO Release Acceptance has been issued to a User, the User shall be liable to pay the 5 Week Ahead SO Release Charge as follows:
 - (i) **The Company** shall invoice the **User** on the first or fifteenth day of the month as applicable in accordance with the **SO ST Release Methodology**; and
 - (iii) payment of the **5 Week Ahead SO Release Charge** shall be due within 14 days of the date of such invoice.
- (b) The provisions of Paragraph 6.6 of Section 6 of the **CUSC** shall apply in all other respects to this Paragraph 8 of this Appendix 3, subject to this section prevailing in the case of any inconsistencies.

Security Cover

(c) For the purposes of Paragraph 3.22 of Section 3, where a 5 Week Ahead SO Release Acceptance has been issued to a User, and unless arrangements have been made pursuant to CUSC Paragraph 6.6.5, the User's Security Requirement in respect of the 5 Week Ahead SO Release Charge shall be the 5 Week Ahead SO Release Charge for the 5 Week Ahead SO Release Period any security to be put in place for such period by the Business Day prior to the start of the 5 Week Ahead SO Release Period.

8.3 Post-allocation information

- 8.3.1 Following each 5 Week Ahead SO Release Auction, The Company shall publish the following information: in respect of each Node:
 - details of each 5 Week Ahead SO Release Bids where a 5 Week Ahead SO Release Acceptance has been issued;
 - details of each 5 Week Ahead SO Release Acceptance issued;
 - details of each 5 Week Ahead SO Release Bid where a 5 Week Ahead SO Release Acceptance has not been issued,

in such form and manner as shall be prescribed by **The Company** from time to time.

8.3.2 The **User** consents to the publication by **The Company** of the information referred to above.

8.4 Buy Back Price

- 8.4.1 Where a **5 Week Ahead SO Release Acceptance** has been issued in respect of a **5 Week Ahead SO Release Bid** with a **Buy Back Price**:
 - 8.4.1.1. During the **5 Week Ahead SO Release Period** the **User** shall not, in respect of the MW that are the subject of the **5 Week Ahead SO Release**, submit into the **Balancing**

Mechanism a Bid Price less than the Buy Back Price; and

8.4.1.2. In the event that the **User** does not comply with the provisions of Paragraph 8.4.1.1 above then the provisions of the **SO Release Transmission Related Agreement** shall apply.

9. ENTRY OVERRUN

9.1 Background

A User, who is party to a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement may, once any Transmission Connection Asset Works and LCN Transmission Reinforcement Works have been completed where required, export power on to the GB Transmission System in excess of its Access Capacity and up to its LCN.

9.2 Charging, Invoicing, Payment and Security

Charging and Payment provisions

- 9.2.1 The User shall be liable to pay Entry Overrun Charges calculated in accordance with the Use of System Charging Methodology.
- 9.2.2 On Friday of each week or where such day is not a **Business Day**, on the first **Business Day** following the Friday **The Company** shall send an invoice to a **User** for any **Settlement Days** where the **User** has utilised **Entry Overrun** and which have not previously been invoiced.
- 9.2.3 Where a **User** has received an invoice from **The Company** pursuant to paragraph 9.2.2 of this Appendix, the **User** shall pay such invoice on or before the date specified in such invoice.

9.2.5 Reconciliation

9.2.5.1 Initial Reconciliation Statement

As soon as reasonably practicable and in any event by 30 June in each Financial Year The Company shall calculate in accordance with the Statement of the Use of System Charging Methodology the Overrun Charges that would have been payable by the User during each month during the preceding Financial Year (the "Actual Overrun Amount"). The Company shall then compare the Actual Overrun Amount with the Overrun Charges paid by the User each month during that preceding Financial Year (the "Notional Overrun Amount"). Then as soon as reasonably practicable and in any event by 30 June The Company shall prepare an initial Entry Overrun reconciliation statement (the "Initial Entry Overrun Reconciliation Statement") in respect of Entry Overrun Charges and send it to the User. Such statement shall specify the Actual Overrun Amount and the Notional Overrun Amount of Entry Overrun Charges for each month during the relevant Financial Year and, in reasonable detail, the information from which such amounts were derived and the manner in which they were calculated.

9.2.5.2 Together with the Initial Entry Overrun Reconciliation Statement The Company shall issue a credit note in relation to any sum shown by the Initial Entry Overrun Reconciliation Statement to be due to the User or an invoice in respect of sums due to The Company and in each case interest thereon calculated pursuant to Paragraph 9.2.5.5 to this Appendix 3.

9.2.5.3 Final Reconciliation Statement

- (a) The Company shall as soon as reasonably practicable following receipt by it of the Final Reconciliation Settlement Run or Final Volume Reconciliation Allocation Run as appropriate in respect of the last Settlement Day in each Financial Year issue a further Entry Overrun reconciliation statement (the "Final Entry Overrun Reconciliation Statement") in respect of Entry **Overrun Charges** payable in respect of each month of that Financial Year showing:-
 - (i) any change in the Entry Overrun Charges from those specified in the Initial Entry Overrun Reconciliation Statement provided in accordance with Paragraph 9.2.5.1
 - (ii) whether the change represents a reconciliation payment owing by The Company to a User or by a User to The Company;
 - (iii) the amount of interest determined in accordance with Paragraph 9.2.5.5 below; and

- (iv) the information from which the amounts in (i) and (iii) above are derived and the manner of their calculation.
- (b) Together with the Final Entry Overrun Reconciliation Statement The Company shall issue a credit note in relation to any sum shown in the Final Entry Overrun Reconciliation Statement to be due to the User or an invoice in respect of sums due to The Company and in each case interest thereon calculated pursuant to Paragraph 9.2.5.5.
- (c) Payment of any invoice issued pursuant to Paragraph 9.2.5.3(b) above or the application of any credit note issued pursuant to that paragraph against any liability of the User to The Company for Entry Overrun Charges will be in full and final settlement of all Entry Overrun Charges for the Financial Year to which the invoice or credit note relates provided that nothing in this Paragraph 9.2.5.3(c) shall affect the rights of the parties under the provisions of CUSC Paragraph 7.3.5.
- 9.2.5.4 The right to submit **Initial Entry Overrun Reconciliation Statements** and **Final Entry Overrun Reconciliation Statements** and the consequential invoices and/or credit notes shall survive the termination of the **User's** rights under the **CUSC** and the parties agree that the provisions contained in Paragraph 9.2.5 shall continue to bind them after such termination (the version in existence at the date of termination being the applicable version in the case of any amendments).

9.2.5.5 <u>General Provisions</u>

- (a) Invoices issued under Paragraph 9.2.5.2 and 9.2.5.3(b) above shall be payable within 30 days of the date of the invoice.
- (b) Interest on all amounts due under this Paragraph 9.2.5 shall be payable by the paying CUSC Party to the other on such amounts from the date of payment applicable to the month concerned until the date of actual payment of such amounts and such interest shall be calculated on a daily basis at a rate equal to the Base Rate during such period.

9.2.6 The provisions of Paragraph 6.6 of Section 6 of the CUSC shall apply in all other respects to this Paragraph 9 of Appendix 3, subject to this section prevailing in the case of any inconsistencies.

Security Cover Provisions

9.2.7 For the purposes of Paragraph 3.22 of Section 3, and unless arrangements have been made pursuant to CUSC Paragraph 6.6.5, the User's Security Requirement shall be determined as the Entry Overrun Charges over a 29 day period with any security to be in place by the Business Day prior to the period to be secured

9.3 Entry Overrun Reporting Provisions

The **Company** shall regularly publish information on historic **Entry Overrun** prices (which may initially need to be simulated) to assist **Generators** in deciding how best to export power on to the **GB Transmission System**.

9.4 Monthly Forecast for Entry Overrun

On or before the end of the second week of each month, each **User** shall supply **The Company** with a forecast maximum **Entry Overrun** figure (in MW) for the following month, to inform **The Company** of the forecast generation to be used for the purposes of setting **Entry Overrun Charges**.

10. TEMPORARY TEC EXCHANGES

10.1 Background

- 10.1.1 Two Users that are party to a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement may make a Temporary TEC Exchange in accordance with this Paragraph of Appendix 3.
- 10.1.2 **Temporary TEC Exchanges** shall apply only in respect of products that provide **Use of System** rights the validity of which is limited to the **Financial Year** in which the **Temporary TEC Exchange** takes place.
- 10.1.3 **Temporary TEC Exchanges** shall apply to **TEC** as well as to the **Short Term Access Right Products**.

10.1.4 A User's Access Capacity for any part of the period for which a User applies for Temporary TEC Exchange Rate Request must not exceed its Local Capacity Nomination.

10.2 Form of Temporary TEC Exchange Rate Request

- 10.2.1 A **Temporary TEC Exchange Rate Request** must be received by **The Company** no later than:
 - (i) in cases where the requested Temporary TEC Exchange Period is 9 months or more, 10 weeks and one Business Day before the start date for the Temporary TEC Exchange Period;
 - (ii) in cases where the requested Temporary TEC
 Exchange Period is 6 months or more but is less than 9 months, 7 weeks and one
 Business Day before the start date for the Temporary TEC Exchange Period;
 - (iii) in cases where the requested Temporary TEC
 Exchange Period is 3 months or more but is less than 6 months, 6 weeks and one
 Business Day before the start date for the Temporary TEC Exchange Period;
 - (iv) in cases where the requested Temporary TEC Exchange Period is less than 3 months, 4 weeks and one Business Day before the start date for the Temporary TEC Exchange Period.
- 10.2.2 A Temporary TEC Exchange Rate Request must be made by way of email to be sent to the email address specified in the Temporary TEC Exchange Rate Request Form and confirmed by fax and must attach the Temporary TEC Exchange Rate Request Form duly completed and signed by the Joint Temporary TEC Exchange Users.
- 10.2.3 A Temporary TEC Exchange Rate Request shall not be deemed received by The Company until the Temporary TEC Exchange Rate Request Fee has been paid to The Company and until the faxed copy of the Temporary TEC Exchange Rate Request is received in accordance with Paragraph 10.2.2 of Appendix to this Section 3 of the CUSC.

- 10.2.4 Each **Temporary TEC Exchange Rate Request** must state one **Temporary TEC Exchange Period** only. Each **Temporary TEC Exchange Rate Request** must be by reference to whole MW only.
- 10.2.5 A **Temporary TEC Exchange Rate Request** cannot be made prior to the start of the **Financial Year** to which it relates.
- 10.2.6 A Temporary TEC Exchange Rate Request cannot be made unless The Company has published within that Financial Year a Temporary TEC Exchange Notification of Interest Form from the Temporary TEC Exchange Donor User.
- 10.2.7 A Temporary TEC Exchange Rate Request can be withdrawn at any time upon written notice from the Joint Temporary TEC Exchange Users.
- 10.2.8 The Temporary Donated TEC stated in a Temporary TEC Exchange Rate Request shall not exceed the Transmission Entry Capacity of the Temporary TEC Exchange Donor User.

10.3 Assessment by The Company of Temporary TEC Exchange Rate Requests

- 10.3.1 **The Company** may reject any **Temporary TEC Exchange Rate Request** that is not made in accordance with the provisions of this Paragraph 10 of Appendix 3.
- 10.3.2 The Company will assess Temporary TEC Exchange Rate Requests and whether or not to grant Temporary TEC Exchange Rate Requests at its absolute discretion.
- 10.3.3 Subject to Paragraph 10.3.4 and 10.3.5 of Appendix 3, The Company will start assessing a Temporary TEC Exchange Rate Request no later than:
 - in cases where the requested Temporary TEC Exchange Period is 9 months or more, 10 weeks and one Business Day before the start date for the Temporary TEC Exchange Period;

- (ii) in cases where the requested Temporary TEC Exchange Period is 6 months or more but is less than 9 months, 7 weeks and one Business Day before the start date for the Temporary TEC Exchange Period;
- (iii) in cases where the requested Temporary TEC
 Exchange Period is 3 months or more but is less than 6 months, 6 weeks and one
 Business Day before the start date for the Temporary TEC Exchange Period;
- (iv) in cases where the requested Temporary TEC Exchange Period is less than 3 months, 4 weeks and one Business Day before the start date for the Temporary TEC Exchange Period.
- 10.3.4 If The Company receives more than one Temporary TEC Exchange Rate Request for a Temporary TEC Exchange Period or a request for a Short Term Access Product or a TEC Increase Request which The Company believes will impact on one another, The Company will assess such requests and the capacity available on the GB Transmission System on a first come first served basis such that the request received earliest in time by The Company (as recorded by The Company) will be considered first in terms of capacity available and then the request received next in time after that, and so on.
- 10.3.5 Where under Paragraph 10.3.4 of this Appendix 3, The Company shall be entitled to suspend the assessment and making of the Temporary TEC Exchange Rate Offer in respect of such Temporary TEC Exchange Rate Request or the LDTEC Offer in respect of such LDTEC Request or the STTEC Offer in respect of such STTEC Request or the Offer in respect of such TEC Increase Request.
- 10.3.6 Where the circumstances in Paragraph 10.3.5 of this Appendix 3 apply **The Company** shall as soon as practicable advise the **Joint Temporary TEC Exchange Users** of such suspension giving an indication of the timescale for the **Temporary Exchange Rate Offer**. Where both **Joint Temporary TEC Exchange Users** agree, the **Temporary TEC Exchange Rate Request** can be withdrawn in such circumstances.

10.3.7 No priority will be given to any **Users** who have previously made successful requests for **Short Term** Access Products.

10.4 Notification by The Company

- 10.4.1 Each User confirms and agrees that The Company shall have no liability to it for any Temporary TEC Exchange Rate Request which The Company does not grant in accordance with this Paragraph 10 of this Appendix 3.
- 10.4.2 **The Company** is not obliged to grant any **Temporary TEC Exchange Rate Request** submitted.
- 10.4.3 Any Temporary TEC Exchange Rate Request will only be granted provided that during the Temporary TEC Exchange Period the User's Access Capacity does not exceed its LCN.
- 10.4.4 The Company shall no later than seven days and one Business Day before the start date for the Temporary TEC Exchange Period, by 17:00 on a Business Day either make an Temporary TEC Exchange Rate Offer in response to the Temporary TEC Exchange Rate Request or notify the Joint Temporary TEC Exchange Users that it does not intend to grant a Temporary TEC Exchange Rate Request.

10.5 Charging, Invoicing and Payment

Each **Temporary TEC Exchange Recipient User** must pay the **LDTEC Charge** in respect of the **Temporary Received TEC** even if the **User** does not use the corresponding **Temporary Received TEC**.

10.6 Temporary TEC Exchange Rate Offers

- 10.6.1 A Temporary TEC Exchange Rate Offer shall:
 - be made to both the Temporary TEC Exchange Donor User and the Temporary TEC Exchange Recipient User and state the Temporary Donated TEC and Temporary TEC Exchange Rate;
 - (ii) include in the offer sent to the **Temporary TEC Exchange Donor User** a revised Appendix C

to the relevant **Bilateral Connection** Agreement or **Bilateral Embedded** Generation Agreement (as appropriate) of the Temporary TEC Exchange Donor User which will detail the Temporary Donated TEC and the Temporary TEC Exchange Period for which this applies;

- (iiii) include in the offer sent to the Temporary TEC Exchange Recipient User a revised Appendix C to the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement (as appropriate) of the Temporary TEC Exchange Recipient User which will detail the Temporary Received TEC and the Temporary TEC Exchange Period for which this applies; and
- (iv) be open for acceptance by receipt of the faxed copy of the Temporary TEC Exchange Rate Offer up to 17:00 the following Business Day.
- 10.6.2 A Temporary TEC Exchange Rate Offer must be accepted by both the Joint Temporary TEC Exchange Users within the timescales in Paragraph 10.6.1(iv) of this Appendix 3. Acceptance of a Temporary TEC Exchange Rate Offer shall be made by executing and faxing back the accepted Temporary TEC Exchange Rate Offer. A Temporary TEC Exchange Rate Offer lapses if not accepted by both Temporary TEC Exchange Users within such period.
- 10.6.3 If the Temporary TEC Exchange Rate Offer is accepted in accordance with Paragraph 10.6.1 of this Appendix 3, for the **Temporary TEC Exchange Period** Appendix C to the relevant **Bilateral Agreements** will be that accepted by the Joint Temporary TEC **Exchange Users**, unless otherwise subsequently amended in accordance with such Bilateral Agreement or the CUSC. Upon expiry of the Temporary TEC Exchange Period such Appendix C as it relates to that Temporary TEC Exchange Period shall cease to have effect.

10.7 Temporary TEC Exchange reporting and information provisions

- 10.7.1 **The Company** may publish the following information in respect of **Temporary TEC Exchange Rate Offers** which are accepted:-
 - 1. details of the **Temporary TEC Exchange Period**;
 - 2. details of the **Temporary Donated TEC** and **Temporary Received TEC**;
 - the identity of the Temporary TEC Exchange Donor User and the Temporary TEC Exchange Recipient User;
 - 4. the **Connection Site** or site of **Connection**,

in such form and manner as shall be prescribed by **The Company** from time to time.

- 10.7.2 **The Company** may publish the following information in respect of **Temporary TEC Exchange Rate Offers** which are made are not accepted:-
 - 1. details of the **Temporary TEC Exchange Period**;
 - 2. details of the **Temporary Donated TEC** and **Temporary Received TEC**;
 - 3. the identity of the **Temporary TEC Exchange Donor User**;
 - 4. the **Connection Site** or site of **Connection**,

in such form and manner as shall be prescribed by **The Company** from time to time.

- 10.7.3 **The Company** may publish the following information in respect of **Temporary TEC Exchange Rate Offers** not made:-
 - 1. details of the **Temporary TEC Exchange Period**;
 - 2. details of the **Temporary Donated TEC**;
 - 3. the identity of the **Temporary TEC Exchange Donor User**;

4. the **Connection Site** or site of **Connection**,

in such form and manner as shall be prescribed by **The Company** from time to time.

- 10.7.4 The **Temporary TEC Exchange Donor User** and the **Temporary TEC Exchange Recipient User** consent to the publication by **The Company** of the information referred to above.
- 10.7.5 A User may also from time to time request that The Company advise other Users that such User is interested in making a Temporary TEC Exchange. Such request must be sent by email and a fax copy made using the Temporary TEC Exchange Notification of Interest Form.
- 10.7.6 The Company shall publish such Temporary TEC Exchange Notification of Interest Form on its TEC Register within 10 Business Days of its receipt.

11. SHARED ACCESS CAPACITY

11.1 Background

- 11.1.1 A User, who is party to a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement, may enter into a Shared Access Capacity Notification with another User in accordance with the procedures of this Paragraph 11 of this Appendix 3.
- 11.1.2 A Receiving Sharing User, shall be liable to comply with all the CUSC obligations and other relevant obligations with the exception of charging (unless otherwise provided for in the Statement of the Use of System Charging Methodology) and provision of security obligations, as if that right arises under its existing Bilateral Connection Agreement or Bilateral Embedded Generation Agreement as the case may be.
- 11.1.3 The obligations relating to charging (unless otherwise provided for in the Statement of the Use of System Charging Methodology) and provision of security obligations which relate to any Access Capacity being shared pursuant to this Paragraph 11 of Appendix 3 shall remain with the Donating Sharing User who is granting the other User rights to share its Access Capacity.

- 11.1.4 Any Users wishing to enter into arrangements to share Access Capacity shall make a Shared Access Capacity Rate Request to The Company.
- 11.1.5 A User's Access Capacity and any Use Of System rights exercised pursuant to any Shared Access Capacity Notification must not exceed its Local Capacity Nomination.
- 11.1.6 Where a **User** is interested in entering into any sharing arrangements and wishes **The Company** to do so, **The Company** shall include this information on the **LCN\TEC Register**.

11.2 Form of Shared Access Capacity Rate Request

- 11.2.1 A Shared Access Capacity Rate Request must be made by way of email to be sent to the email address specified in the Shared Access Capacity Rate Request Form and confirmed by fax and must attach the Shared Access Capacity Rate Request Form duly completed and signed by all the Sharing Users.
- 11.2.2 A Shared Access Capacity Rate Request shall not be deemed received by The Company until the Shared Access Capacity Rate Request Fee has been paid to The Company and until the faxed copy of the Shared Access Capacity Rate Request Form is received in accordance with Paragraph 11.2.1 of Appendix 3 to this Section 3 of the CUSC.
- 11.2.3 A Shared Access Capacity Rate Request must be received by The Company no later than:
 - in cases where the requested Sharing Period exceeds 9 months, 15 weeks and one Business Day before the start date for the Sharing Period;
 - (ii) in cases where the requested Sharing Period is 6 months or exceeds 6 months but does not exceed 9 months, 12 weeks and one Business Day before the start date for the Sharing Period;
 - (iii) in cases where the requested Sharing Period exceeds 3 months but is less than 6 months, 11 weeks and one Business Day before the start date for the Sharing Period.

- (iv) in cases where the requested Sharing Period is less than 3 months, 9 weeks and one Business Day before the start date for the Sharing Period.
- (v) in cases where the requested Sharing Period goes beyond the current Financial Year, 19 weeks and one Business Day before the start date for the Sharing Period.
- 11.2.4 Each Shared Access Capacity Rate Request must state the Sharing Users, the Sharing Power Stations, the Nodes relating to the Sharing Power Stations, the maximum volume in whole MW that it is proposed to share and the Sharing Period.
- 11.2.5 A Shared Access Capacity Rate Request can be withdrawn at any time upon written notice from the Sharing users.

11.3 Assessment by The Company of Shared Access Capacity Rate Request

<u>Circumstances where Shared Access Capacity Rate</u> <u>Requests may be rejected</u>

11.3.1 **The Company** may reject any **Shared Access Capacity Rate Request** that is not made in accordance with the provisions of this Paragraph 11 of Appendix 3.

General provisions on assessment of Shared Access Capacity Rate Requests

- 11.3.2 Subject to Paragraph 11.3.3 of this Appendix 3, The Company will start assessing a Shared Access Capacity Rate Request no later than:
 - in cases where the requested Sharing Period exceeds 9 months, 9 weeks and one Business Day before the start date for the Sharing Period;
 - (ii) in cases where the requested Sharing Period exceeds 6 months but does not exceed 9 months, 6 weeks and one Business Day before the start date for the Sharing Period;

- (iii) in cases where the requested Sharing Period exceeds 3 months but is less than 6 months, 5 weeks and one Business Day before the start date for the Sharing Period;
- (iv) in cases where the requested Sharing Period but is less than 3 months, 3 weeks and one Business Day before the start date for the Sharing Period; and
- (v) in cases where the requested Sharing Period goes beyond the current Financial Year, 3 months and one Business Day before the start date for the Sharing Period.
- 11.3.3 If **The Company** receives more than one **Shared Access Capacity Rate Request** which **The Company** believes will impact on one another, **The Company** will assess such requests and the exchange rate available on a first come first served basis such that the request received earliest in time by **The Company** (as recorded by **The Company**) will be considered first in terms of capacity available and then the request received next in time after that, and so on.

11.4 Notification by The Company

- 11.4..1 **The Company** shall provide a **Sharing Exchange Rate Offer** to both of the **Sharing Users** by fax as follows:
 - where the Sharing Period does not go beyond the current Financial Year no later than six weeks and one Business Day before the start date for the Sharing Period; and
 - (ii) where the Sharing Period does go beyond the current Financial Year no later than seven weeks and one Business Day before the start date for the Sharing Period

11.5 Sharing Exchange Rate Offers

11.5.1 A Sharing Exchange Rate Offer shall state the Sharing Exchange Rate

11.5.2 A Sharing Exchange Rate Offer must be accepted within 7 days of receipt of the faxed copy of the Sharing Exchange Rate Offer and to be effective must be accepted by both the Sharing Users. A Sharing Exchange Rate Offer lapses if not accepted by both Sharing Users within such period.

- 11.5.3 Acceptance of the Sharing Exchange Rate Offer shall be made by the Sharing Users submitting a Shared Access Notification to The Company and during the Sharing Period:
 - (a) where the Receiving Sharing User does not exceed the aggregate of its Access Capacity and the Shared Access Capacity and provided the Donating Sharing User does not exceed its Access Capacity less the Shared Access Capacity Rate then although the Receiving Sharing User is exceeding its Access Capacity it shall not be subject to any Entry Overrun Charges in respect of such export;
 - (b) in the event that this is not the case then unless the Shared Access Capacity Notification, states otherwise the Receiving Sharing User shall be subject to Entry Overrun Charges in respect of any such export above its Access Capacity.

11.6 Consequences of breach of CUSC provisions

- 11.6.1 The following provision shall apply in the event that **CUSC Amendment Proposal** 162 is not approved by the **Authority** or if so approved until **CUSC Amendment Proposal** 162:
- 11 In the event that the situation in 11.5.3(b) occurs the party responsible for the breach shall, unless the Shared Access Capacity Notification, states otherwise be the Nominated User.

END OF APPENDIX 3

Proposed Amendments to CUSC Section 6 under CAP 161 (LCN and Short Term Access Products), 162 (Entry Overrun) and 163 (TEC Sharing)

Please note that the numbering of the respective paragraphs is given in the heading above each section of text (rather than given next to the paragraph text).

New paragraph 6.6.8 (Payment)

6.6.8 With respect to the 2 Day Ahead SO Release Charge, 5 Week Ahead SO Release Charge, CLDTEC Charge and Entry Overrun Charges, the provisions of this Paragraph 6.6 shall apply to the payment and invoicing of such charges but shall be subject to any further invoicing and payment provisions for such charges set out in Appendix 3 to Section 3 of the CUSC.

Paragraphs 6.30 (Transmission Entry Capacity)

This paragraph has been moved out of Section 6 and inserted in Appendix 3 to Section 3 as Paragraph 2 of the CUSC. This Appendix now deals with the different types of access products. The text itself has not changed other than to update any references or where specifically highlighted within that text.

Paragraph 6.31 (Short Term Transmission Entry Capacity)

This paragraph has been moved out of Section 6 and inserted in Appendix 3 to Section 3 Paragraph 3 of the CUSC. This Appendix now deals with the different types of access products. The text itself has not changed other than to update any references or where specifically highlighted within that text.

Paragraph 6.32 (Limited Duration Transmission Entry Capacity)

This paragraph has been moved out of Section 6 and inserted in Appendix 3 to Section 3 Paragraph 4 of the CUSC This Appendix now deals with the different types of access products. The text itself has not changed other than to update any references or where specifically highlighted within that text.

Paragraph 6.34 (Temporary TEC Exchanges)

This paragraph has been moved out of Section 6 and inserted in Appendix 3 to Section 3 as Paragraph 10 of the CUSC. This Appendix now deals with the different types of access products. The text itself has not changed other than to update any references or where specifically highlighted within that text.

General - Renumbering

Please note that as a result of the proposed amendments the clause numbering has been changed in some instances (as identified in the paragraph headings, above). This has meant that cross-references throughout the document have changed, those changes have not been shown here, unless they appear in paragraphs with more substantial amendments.

Proposed Amendments to CUSC Section 9 under CAP 161 (LCN and Short Term Access Products), 162 (Entry Overrun) and 163 (TEC Sharing)

Please note that the numbering of the respective paragraphs is given in the heading above each section of text (rather than given next to the paragraph text).

Paragraph 9.4 (Export of Power from the Interconnector Connection Site)

9.4 EXPORT OF POWER FROM THE INTERCONNECTOR CONNECTION SITE

Subject to the other provisions of the CUSC, the relevant Bilateral Connection Agreement and the Grid Code and any Operating Agreement, The Company shall, as between The Company and a User acting in the category of an Interconnector, accept into the GB Transmission System at the Connection Site of an Interconnector power up to the Transmission Entry Capacity and (if any) STTEC and\or LDTEC and\or any Temporary Received TEC less any Temporary Donated TEC for the relevant Periodspecified Node power generated by such User up to that User's LCN as specified in Appendix C to the relevant Bilateral Connection Agreement except to the extent (if any) that The Company is prevented from doing so by transmission constraints which could not be avoided by the exercise of Good Industry Practice.

Paragraph 9.6

9.6 The User shall not permit the transfer of any amount of electricity onto the GB Transmission System in excess of the Transmission Entry Capacity and (if any) STTEC and/or LDTEC and/or any Temporary Received TEC less any Temporary Donated TEC for the relevant Period its LCN_specified in Appendix C to the relevant Bilateral Connection Agreement or permit the taking of any amounts of electricity off the GB Transmission System in excess of the value as specified in Appendix C to the relevant Bilateral Connection Agreement save as expressly permitted or instructed pursuant to an Emergency Instruction under the Grid Code or save as expressly permitted pursuant to any Operating Agreement or the Fuel Security Code or as may be necessary or expedient in accordance with Good Industry Practice.

Paragraph 9.10.1 (Use of System Charges - Transmission Network Use of System Charges)

9.10.1 Subject to the provisions of the CUSC, and any relevant Bilateral Agreement, together with the relevant Charging Statements, the User shall with effect from the relevant date set out in the relevant Bilateral Agreement, be liable to pay to The Company the Transmission Network Use of System Charges and (if appropriate) the STTEC Charge and LDTEC Charge in accordance with the CUSC calculated in accordance with the Statement of Use of System Charges and the Statement of the Use of System Charging Methodology. The Company shall apply and calculate the Use of System Charges in accordance with the Statement of Use of System Charges and the Statement of the Use of System Charging Methodology.

New paragraph 9.10.2 (Liability for Short Term Access Product Charges)

Liability for Short Term Access Product Charges Each User shall, as between The Company and that User, in accordance with this Paragraph 9.10 and Paragraph 6.6 and Appendix 3 to Section 3, be liable where appropriate to pay to The Company the Short Term Access Product Charges in respect of its use of the GB Transmission System applied and calculated in accordance with the Statement of Use of System Charges, Statement of the Use of System Charging Methodology and Appendix 3 to Section 3 and Standard Condition C13 of the Transmission Licence.

New paragraph 9.10.3 (Liability for Payment of Entry Overrun Charges)

Liability for payment of Entry Overrun Charges

9.10.3 Each User shall, as between The Company and that User, in accordance with this Paragraph 9.10 and Paragraph 6.6 and Appendix 3 to Section 3, be liable where appropriate to pay to The Company (or The Company shall be so liable to pay to the User) Entry Overrun Charges in respect of its use of the GB Transmission System over and above its Access Capacity applied and calculated in accordance with the Statement of Use of System Charges and Statement of the Use of System Charging Methodology and Standard Condition C13 of the Transmission Licence.

Paragraph 9.22.3 (Use of System Charges - Balancing Services Use of System Charges)

9.22.3 Each User shall as between The Company and that User provide The Company with Security Cover in respect of Transmission Services Use of System Charges. Short Term Access Products Charges. Entry Overrun Charges and Balancing Services Use of System Charges in accordance with the provisions of Part III of Section 3.3, the provisions of Appendix 3 to Section 3 of the CUSC.

Paragraph 9.22.4 (Use of System Charges - Balancing Services Use of System Charges)

9.22.4 Paragraphs 3.21 to 3.24 (Credit Requirements) and Appendix 3 to Section 3 of the CUSC as they relate to Transmission Services Use of System Charges, Short Term Access Products Charges, Entry Overrun Charges and Balancing Services Use of System Charges shall apply as if set out herein in full and as if references to Generators were references to Interconnector Users and to Interconnector Error Administrators (as the case may be).

Renumbering

Please note that as a result of the proposed amendments the clause numbering has been changed in some instances (as identified in the paragraph headings, above). This has meant that cross-references throughout the document have changed, those changes have not been shown here, unless they appear in paragraphs with more substantial amendments.

CUSC - SECTION 10

TRANSITION ISSUES

CONTENTS

Deleted: <u>Not used, removed on</u> <u>15th February 2007, dedicated to</u> <u>Transitional Issues</u>¶

Part 1 CUSC AMENDMENT PROPOSALS 161-163

Part 1

10.1 INTRODUCTION

- 10.1.1 This Section 10 deals with issues arising out of the transition associated with the approval and implementation of **CUSC Amendment Proposal** 161 (Short Term SO release) and/or 162 (Overrun) and/or 163 (Sharing) which all introduce the concept of a Local Capacity Nomination which forms the basis of a User's right to Use of System.
- 10.1.2 The Access Amendment Proposals affect User's in the categories of Power Stations directly connected to the GB Transmission System, Embedded Generators with a Bilateral Embedded Generation Agreement and Interconnector Owners and references to User or Applicant in this Section 10 shall be construed accordingly.

10.1.3 In this Section 10:

- the term "Access Amendment Proposals", shall mean CUSC Amendment Proposals 161 (Short Term SO release),162 (Overrun) and 163 (Sharing);
- (b) the term "Agreed LCN", shall mean a Local Capacity Nomination which is different from the Default LCN and which has been agreed by The Company and the User;
- (c) the term "Applicants"; shall mean Users (or prospective Users) who apply during the LCN Transition Period for connection to and/or use of the GB Transmission System;
- (d) the term "Application and Offer Amendments", shall mean those amendments to CUSC Exhibits B, C, D and E approved by the first of the Access Amendment Proposals to become an Approved Amendment;
- (e) the term "Bilateral Agreement Amendments", shall mean those amendments to CUSC Schedule 2 Exhibit 1 (Bilateral Connection Agreement) and Exhibit 2 (Bilateral Embedded Generation Agreement) and Exhibit 3 (Construction Agreement) approved by the first of the Access Amendment Proposals to become an Approved Amendment;

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- (f) the term "Default LCN" shall mean a Local Capacity Nomination at the same or lower MW volume and subject to the same restrictions (unless The Company agrees otherwise) as the Transmission Entry Capacity within the relevant Existing CUSC Agreement;
- (g) the term "Existing CUSC Agreement" shall mean a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement pursuant to which a User is by the Relevant Date connected to and/or using the GB Transmission System;
- (h) the term "LCN Implementation Date" shall mean the Implementation Date for the first of the Access Amendment Proposals (unless it is provided to be different in relation to a particular provision),
- the term "LCN Transition Period", means the period from the Relevant Date and ending on and including the day before the LCN Implementation Date (unless it is provided to be different in relation to a particular provision) and is the period with which this Section 10 deals;
- (j) the term "New CUSC Agreements", shall mean a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement or any agreement to vary the same and the associated Construction Agreement but pursuant to which the User is not yet connected to and/or using the GB Transmission System at the Relevant Date;
- (k) the term "Outstanding Applications", shall mean an offer yet to made to a User or prospective User of a Bilateral Connection Aareement Bilateral Embedded or Generation Agreement or any agreement to the the same and associated vary Construction Agreement at the Relevant Date but where the application was made prior to the Relevant Date;

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- (I) the term "Outstanding Offers", shall mean an offer to a User or prospective User of a Bilateral Connection Agreement or Bilateral Embedded Generation Agreement or any agreement to vary the same and the associated Construction Agreement which has not been accepted at the Relevant Date but is still capable of being accepted; and
- (m) the term "**Relevant Date**" means the day on which the first of the **Access Amendment Proposals** becomes an **Approved Amendment**.
- 10.1.4 Without prejudice to any specific provision under this Section 10 as to the time within which or the manner in which **The Company** or a User should perform its obligations under this Section 10, where **The Company** or a **User** is required to take any step or measure under this Section 10, such requirement shall be construed as including any obligation to:
 - take such step or measure as quickly as reasonably practicable; and
 - (b) do such associated or ancillary things as may be necessary to complete such step or measure as quickly as reasonably practicable.

10.2 LCN TRANSITION

Existing Agreements

- 10.2.1 Each User shall advise The Company as soon as practicable and in any event within one month (or such longer period as The Company and that User agree) of the Relevant Date of those Existing CUSC Agreements:
 - (a) where it wants the Local Capacity Nomination to be at a higher or lower MW volume than the Default LCN; and

where the MW volume is higher than the **Default LCN** the **User** shall as soon as practicable make a **Modification Application** to **The Company** in respect of the relevant **Existing CUSC Agreement**.

10.2.2 Where a **Modification Application** is made and **Construction Works** are required prior to such increase in MW volume becoming effective **The Company** shall make an offer to amend the relevant **Existing CUSC Agreements** such that

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they provide for a Local Capacity Nomination at the level proposed and on the same basis as if such Modification Application had been made after the LCN Implementation Date. The Existing User will be required as part of that offer to enter into a Construction Agreement and the works will need to be completed prior to that Local Capacity Nomination becoming effective. Until that time the Local Capacity Nomination shall be the Default LCN or such lower Local Capacity Nomination as The Company and the User shall agree.

- 10.2.3 Except as specifically otherwise provided for in an agreement to vary between **The Company** and the **User** each **Existing CUSC Agreement** shall be read and construed, with effect from the **LCN Implementation Date**, such that:
 - (a) the defined terms within it, and the effect of those defined terms, shall, in place of their respective meanings immediately before the LCN Implementation Date, be deemed to have the meanings they would have had if those agreements had been entered into after the LCN Implementation Date.
 - (b) the right to use the GB Transmission System is by reference to "Local Capacity Nomination" instead of "Transmission Entry Capacity" and the clauses within the Existing CUSC Agreement are amended in the manner provided for by the Bilateral Agreement Amendments.
 - (c) Appendix C to the Existing CUSC Agreement includes reference to the "Local Capacity Nomination" in the manner provided for in the Bilateral Agreement Amendments; and
 - (d) the Local Capacity Nomination is the Default LCN or Agreed LCN as appropriate.

New Agreements

10.2.4 Each User shall advise The Company as soon as practicable and in any event within one month (or such longer period as The Company and that User agree) of the Relevant Date of those New CUSC Agreements:

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- (a) where it wants the Local Capacity Nomination to be at a higher or lower MW volume than the Default LCN; and/or
- (b) those New CUSC Agreements; where it wants to amend the Construction Programme such that the Construction Works are staged to provide for the Local Capacity Nomination before the Transmission Entry Capacity; and

where the MW volume is higher than the **Default LCN** and/or the **User** wishes to amend the **Construction Programme** the **User** shall as soon as practicable make a **Modification Application** to **The Company** in respect of the relevant **New CUSC Agreement**.

- 10.2.5 Where a Modification Application is made The Company shall make an offer to amend the relevant New CUSC Agreements such that they provide for a Local Capacity Nomination at the MW level proposed and a revised Construction Programme on the same basis as if such Modification Application had been made after the LCN Implementation Date and consistent with the Bilateral Agreement Amendments.
- 10.2.6 Except as specifically agreed otherwise between **The Company** and the **User** each **New CUSC Agreement** shall be read and construed, with effect from the **LCN Implementation Date**, such that:
 - (a) the defined terms within it, and the effect of those defined terms, shall, in place of their respective meanings immediately before the LCN Implementation Date, be deemed to have the meanings they would have had if those agreements had been entered into after the LCN Implementation Date.
 - (b) the right to use the GB Transmission System is by reference to "Local Capacity Nomination" instead of "Transmission Entry Capacity" and the clauses within the New CUSC Agreement are amended in the manner provided for by the Bilateral Agreement Amendments.
 - (c) Appendix C to the New CUSC Agreement includes reference to the "Local Capacity

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Nomination" in the manner provided for in the Bilateral Agreement Amendments;

- (d) the Local Capacity Nomination is the Default LCN or Agreed LCN as appropriate;
- (e) and the relevant Clauses and Appendices within the **Construction Agreement** are amended in the manner provided for in the **Bilateral Agreement Amendments**.
- 10.2.7 Each **User** acknowledges and agrees that the provisions of Paragraphs 10.2.3 and 10.2.6 shall apply notwithstanding the provisions in the **Existing CUSC Agreements** as to variation of those agreements.

Outstanding Applications

- 10.2.8 Each User shall advise The Company as soon as practicable after the Relevant Date as to whether, in respect of any Outstanding Applications, it wants the Local Capacity Nomination to be at a higher or lower MW volume than the Transmission Entry Capacity as stated in its application and/or whether it wants the Construction Works staged to provide for the Local Capacity Nomination before Transmission Entry Capacity.
- 10.2.9 The Company shall consider the application in light of any such revisions and make the offer on the same basis as if such Outstanding Application had been made after the LCN Implementation Date and consistent with the Application and Offer Amendments and Bilateral Agreement Amendments and to the extent practicable within the original timescales.

Outstanding offers

- 10.2.10 Each User shall advise The Company as soon as practicable after the Relevant Date as to whether, in respect of any Outstanding Offers, it wants the Local Capacity Nomination to be at a higher or lower MW volume than the Transmission Entry Capacity as stated in its application and/or whether it wants the Construction Works staged to provide for the Local Capacity Nomination before Transmission Entry Capacity.
- 10.2.11 In any event **The Company** shall as soon as practicable make such amendments to the **Outstanding Offers** as necessary to make such **Outstanding Application** consistent with the form and contents of offers made after the **LCN Implementation Date**.

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Applicants

- 10.2.12 Each Applicant shall submit a Connection Application or Use of System Application in a form consistent with the Application and Offer Amendments.
- 10.2.13 The Company shall prepare the offer in a form and manner consistent with the Application and Offer Amendments and Bilateral Agreement Amendments.

END OF SECTION 10

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SCHEDULE 2 - EXHIBIT 1

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

and

[

] (2)

THE CONNECTION AND USE OF SYSTEM CODE

BILATERAL CONNECTION AGREEMENT

[FOR A DIRECTLY CONNECTED POWER STATION]

[FOR A DIRECTLY CONNECTED DISTRIBUTION SYSTEM]

[FOR A NON-EMBEDDED CUSTOMER SITE]

[FOR AN INTERCONNECTOR OWNER]

At [] Reference: []

CONTENTS

- 1. Definitions, Interpretation and Construction
- 2. Commencement
- 3. The Connection Site and Transmission Connection Assets
- 4. Connection Charges
- [5. Use of System] (power station only)
- 6. Credit Requirements
- 7. Connection Entry Capacity and Transmission Entry Capacity
- 8. Compliance with Site Specific Technical Conditions
- [9. Electrical Boundary] (Non Standard Boundary only)
- [10. Restrictions on availability] (power station with Design Variation only)
- 11. Term
- 12. Variations
- 13. General Provisions
- Appendix A The Connection Site and Transmission Connection Assets/<u>Node</u>
- Appendix B Connection Charges
- Appendix C Connection Entry Capacity, Local Capacity Nomination and Transmission Entry Capacity (Power Stations and Interconnector Owners)
- Appendix F1 Site Specific Technical Conditions Agreed Balancing Services
- Appendix F2 [Not Used]
- Appendix F3 Site Specific Technical Conditions Special Automatic Facilities
- Appendix F4 Site Specific Technical Conditions Protection and Control Relay Settings - Fault Clearance Times

Appendix F5 Site Specific Technical Conditions - Load Shedding Frequency Sensitive Relays

THIS **BILATERAL CONNECTION AGREEMENT** is made on the [] day of [] 200[]

BETWEEN

- (1) National Grid Electricity Transmission plc a company registered in England with number 2366977 whose registered office is at 1-3 Strand, London, WC2N 5EH ("The Company", which expression shall include its successors and/or permitted assigns); and
- (2) [] a company registered in [] with number [] whose registered office is at [] ("**User**", which expression shall include its successors and/or permitted assigns)

WHEREAS

- (A) Pursuant to the Transmission Licence, The Company is required to prepare a Connection and Use of System Code (CUSC) setting out the terms of the arrangements for connection to and use of the GB Transmission System and the provision of certain Balancing Services.
- (B) The User has applied for [Connection to] [and use of] [Modification of its existing Connection to [and use of]] the GB Transmission System and pursuant to the Transmission Licence The Company is required to offer terms in this respect.
- (C) The **User** has applied for connection [and use] in the capacity of a [] as set out in Paragraph 1.2.4 of the **CUSC**.
- (D) **The Company** and the **User** are parties to the **CUSC Framework Agreement** (being an agreement by which the **CUSC** is made contractually binding between **CUSC Parties**).
- (E) This **Bilateral Connection Agreement** is entered into pursuant to the **CUSC** and shall be read as being governed by it.
- [(F) The parties are also on even date herewith entering into a **Construction Agreement**.]

NOW IT IS HEREBY AGREED as follows:

1. DEFINITIONS, INTERPRETATION AND CONSTRUCTION

Unless the subject matter or context otherwise requires or is inconsistent therewith, terms and expressions defined in Section 11 of the **CUSC** have the same meanings, interpretations or constructions in

this **Bilateral Connection Agreement** [and the following terms and expressions shall have the meaning set out below:-

"Construction Agreement"	the agreement made between the parties of even date herewith for the carrying out of construction works;				
"Charging Date"	as Agr	defined eement.	in	the	Construction
l					

["Circuit []" [insert detailed description of circuit(s) affected by the **Design Variation**] (power station with **Design Variation** and\or **Non Standard Boundary** only);]

["Outage Conditions []" the unavailability of Circuit [] as a result of

- (a) a [planned]/[unplanned]/[planned or unplanned] incident occurring directly on Circuit []; or
- (b) Circuit [] requiring to be Deenergised for health and safety reasons to allow for the planned or unplanned availability of a circuit in the immediate vicinity of Circuit []; (power station with Design Variation and\or Non Standard Boundary only)]

["Outage Period" the period of time during which the Outage Conditions and/or reduced circuit capability apply; *(power station with Design Variation and\or Non Standard Boundary only)*]

["Notification of Circuit Restrictions" means the notification issued by The Company to the User in accordance with Clause [10.8] of this Bilateral Connection Agreement; (power station with Design Variation and\or Non Standard Boundary only)]

["Notification of Outage Conditions" means the notification issued by The Company to the User in accordance with Clause [10.4] of this Bilateral Connection Agreement; (power station with Design Variation and\or Non Standard Boundary only)]

["Notification of Restrictions on Availability" means a Notification of Outage Conditions and\or a Notification of Circuit Restrictions as applicable; (power station with **Design Variation** and\or **Non Standard Boundary** only)]

["Relevant Circuits" means [Circuit []]; (power station with Design Variation and\or Non Standard Boundary only)]

["Transmission Related Agreement" means the agreement of even date entered into between the parties for the provision of and payment for Balancing Services in respect of Bid-Offer Acceptances; (power station with Design Variation and\or Non Standard Boundary only)]

2. COMMENCEMENT

This **Bilateral Connection Agreement** shall commence on [].

3. THE CONNECTION SITE AND, TRANSMISSION CONNECTION ASSETS AND NODE

3.1 The [Connection Site/Node] and Transmission Connection Assets to which <u>the Connection rights granted pursuant to</u> this Bilateral Connection Agreement relates is relate are more particularly described in Appendix A.

4. CONNECTION CHARGES

The **Connection Charges** payable by the **User** in accordance with the **CUSC** in respect of the **Transmission Connection Assets** set out in Appendix A [(including the **One-Off Charge**)] are set out in Appendix B. These **Connection Charges** shall be payable by the **User** from the [**CUSC Implementation Date**] [or] [**Charging Date.**]

- 5. [USE OF SYSTEM (power station only)
- 5.1 The right to use the GB Transmission System <u>at the Node up to the</u> User's LCN shall commence on and Use of System Charges shall be payable by the User from the [CUSC Implementation Date] [or] [Charging Date.]

6. CREDIT REQUIREMENTS

The amount to be secured by the **User** from [date] is set out in the **Secured Amount Statement** issued from time to time and as varied from time to time in accordance with Section 2 of the **CUSC**.

7. CONNECTION ENTRY CAPACITY, LOCAL CAPACITY NOMINATION AND TRANSMISSION ENTRY CAPACITY

- 7.1 The Connection Entry Capacity in relation to the Generating Units and the [Connection Site/ Node] and the Local Capacity Nomination and the Transmission Entry Capacity in relation to the [Connection Site / Node], are specified in Appendix C.
- 7.2 Appendix C Part 34 will set out the BM Unit Identifiers of the BM Units registered at the [Connection Site/Node] under the Balancing and Settlement Code. The User will provide The Company with the information needed to complete details of these BM Unit Identifiers as soon as practicable after the date hereof and thereafter in association with any request to modify the Local Capacity Nomination and/or Transmission Entry Capacity and The Company shall prepare and issue a revised Appendix C incorporating this information. The User shall notify The Company prior to any alteration in the BM Unit Identifiers and The Company shall preparedprepare and issue a revised Appendix C incorporating this information.
- 7.3 The Company shall monitor the Users compliance with its obligation relating to Transmission Entry CapacityLCN in relation to the [Connection Site/Node] against the sum of metered volumes of the BM Units set out in Part 34 of Appendix C submitted by the User for each Settlement Period.

8. COMPLIANCE WITH SITE SPECIFIC TECHNICAL CONDITIONS

The site specific technical conditions applying to the **Connection Site** are set out in Appendices F1 to F5 to this **Bilateral Connection Agreement** as modified from time to time in accordance with Paragraph 6.9 of the **CUSC**.

9. [ELECTRICAL BOUNDARY (Non Standard Boundary only)

The division of ownership of **Plant** and **Apparatus** shall be at [define ownership boundary]. For the avoidance of doubt, nothing in this Clause 9 shall effect any transfer of ownership in any **Plant** or **Apparatus**.]

10. [RESTRICTIONS ON AVAILABILITY (power station with Design Variation and\or Non Standard Boundary only)

- 10.1 [The division of ownership of **Plant** and **Apparatus** in Clause 9 above is contrary to the principles of ownership set out in **CUSC** Paragraph 2.12.]
- 10.2 [In addition the] [The] User acknowledges that the connection design which provides for connection to the GB Transmission System is a variation to the connection design as provided for in Chapter 2 of the GB SQSS.
- 10.3 It is a condition of the **GB SQSS** that any **Design Variation** satisfies the criteria set out in paragraphs 2.15 to 2.18 (inclusive) of the **GB SQSS** and on that basis [and in light of the non standard principles of ownership] the following provisions will apply.
- 10.4 **The Company** shall issue to the **User** a notice that advises the **User** of the occurrence of the **Outage Conditions** and where practicable the expected **Outage Period**. Such notice shall be issued:
- 10.4.1 In the event that the **Notification of Circuit Outage** relates to a **Planned Outage** on the **GB Transmission System**, where practicable, be in accordance with **Grid Code** OC2 requirements; or
- 10.4.2 In the event that the Notification of Circuit Outage relates to something other than a Planned Outage on the GB Transmission System or relates to a Planned Outage on the GB Transmission System but it is not practicable for such notice to be in accordance with Grid Code OC2 requirements, as soon as reasonably practicable and The Company and the User shall agree as soon as practicable after the date hereof the method of such notification.
- 10.4.3 **The Company** shall promptly notify the **User** when the **Outage Period** will or has ceased.
- 10.5 **The Company** shall be entitled to revise the **Notification of Circuit Outage** given under Clause 10.4 above at any time.
- 10.6 The User will acknowledge receipt of such Notification of Circuit Outage and where practicable shall revise its Output Useable forecast for the affected BM Unit accordingly.
- 10.7 Following such **Notification of Circuit Outage** in accordance with Clause 10.4:
- 10.7.1 [(i) In respect of the Outage Conditions [], the User shall (i) ensure that the Maximum Export Limit and Maximum Import Limit for the BM Units relating to the Power Station reflects the outage of the Relevant Circuits and (ii) operate its Power Station to reflect the outage of the Relevant Circuits for all Settlement Periods or parts thereof falling within the Outage Period.]
- 10.7.2 In the event that the **User** does not comply with Clauses [] above, **The Company** shall issue **Bid-Offer Acceptances** to the **User** to reduce the

export from and/or import to the affected **BM Unit** so that the effect is as if the **User** had complied with the relevant Clause, and the provisions of the **Transmission Related Agreement** shall apply.

- 10.8 The Company shall issue to the User a notice that advises the User of the occurrence of an event leading to a reduced circuit capability of Circuit [] and where practicable the expected Outage Period. Such notice (including any revision) shall be issued:
- 10.8.1 In the event that the **Notification of Circuit Restriction** relates to a **Planned Outage** on the **GB Transmission System**, where practicable, be in accordance with **Grid Code** OC2 requirements; or
- 10.8.2 In the event that the Notification of Circuit Restriction relates to something other than a Planned Outage on the GB Transmission System or relates to a Planned Outage on the GB Transmission System but it is not practicable for such notice to be in accordance with Grid Code OC2 requirements, such notice shall be given as soon as reasonably practicable and The Company and the User shall agree as soon as practicable after the date hereof the means of such notification.
- 10.8.4 **The Company** shall promptly notify the **User** when the period of reduced circuit capability will or has ceased.
- 10.9 **The Company** shall be entitled to revise the **Notification of Circuit Restriction** given under Clause 10.8 above at any time.
- 10.10 Following such **Notification of Circuit Restriction** in accordance with Clause 10.8:
- 10.10.1 [(i) In respect of the reduction in capability of Circuit [], the User shall
 (i) ensure that the Maximum Export Limit and Maximum Import Limit for the BM Units relating to the Power Station reflects the reduction in capability of the Relevant Circuits and (ii) operate its Power Station to reflect the reduction in capability of the Relevant Circuits for all Settlement Periods or parts thereof falling within the Outage Period.]
- 10.10.2 In the event that the **User** does not comply with Clauses [] above, **The Company** shall issue **Bid-Offer Acceptances** to the **User** to reduce the export from and/or import to the affected **BM Unit** so that the effect is as if the **User** had complied with the relevant Clause, and the provisions of the **Transmission Related Agreement** shall apply.
- 10.11 Where the **User** becomes aware or is notified by **The Company** of any breach of Clauses 10.7 or 10.10 above the **User** shall forthwith take all reasonable steps to comply with the provisions of that Clause.
- 10.12 Where the **User** breaches in whole or in part the provisions of Clause 10.7 or Clause 10.10 above, the **User** shall at **The Company's** request explain to **The Company's** satisfaction (acting reasonably) the reason for the breach and demonstrate to **The Company's** satisfaction that appropriate steps have been taken to ensure that such breach will not reoccur. In the event that the **User** does not do this **The Company** may

give notice to the **User** reducing the **Transmission Entry Capacity** of the **Connection Site** and Appendix C of this **Bilateral Connection Agreement** shall be varied accordingly. This **Transmission Entry Capacity** shall apply until such time as the **User** has explained to **The Company's** reasonable satisfaction the reason for the breach and has demonstrated that appropriate steps have been taken to ensure that such breach will not reoccur and Appendix C shall be automatically amended thereafter to reflect the reinstatement of the **Transmission Entry Capacity**.

- 10.13 If within 3 months of a breach of Clause 10.7 or Clause 10.10 above which entitled **The Company** to take action under Clause 10.12 above, the **User** has still failed to provide the explanation and\or demonstration required by **The Company** under Clause 10.12 then **The Company** may treat such breach as an **Event of Default** for the purposes of Section 5 of the **CUSC** and following such breach may give notice of termination to the **User** whereupon this **Bilateral Connection Agreement** shall terminate and the provisions of **CUSC** Paragraph 5.4.7 shall apply.
- 10.14 For the avoidance of doubt any **Deenergisation** resulting from the **Outage Conditions** as set out in the relevant **Notification of Restrictions on Availability** constitutes an **Allowed Interruption**.
- 10.15.1 The Company and the User shall act in accordance with Good Industry Practice to minimise so far as reasonably practicable the occurrence and duration of (i) the Outage Conditions and (ii) an Event leading to reduced circuit capability of the Relevant Circuits. The Company and the User will, recognising the effect of the Outage Conditions and the reduced circuit capability on the User's operations, coordinate the Outage Conditions and the reduced circuit capability on the GB Transmission System (where they occur as a result of a Planned Outage) and the User's Plant and Apparatus in accordance with Good Industry Practice and to the extent practicable. The Company and the User acknowledge however that even where Planned Outages are coordinated and agreed that The Company and\or the User may need to cancel or change such Planned Outage.
- 10.15.2 **The Company** and the **User** hereby acknowledge and agree that, where reasonably practicable, alternative operating arrangements shall be implemented to minimise the effect of **Outage Conditions** and reduced circuit capability [, including, but not limited to [describe potential arrangements]]. In the event that **The Company** and the **User** implement alternative operating arrangements in respect of an **Outage Condition** and reduced circuit capability, the provisions of Clauses 10.7 and 10.10 shall not apply to the extent that the alternative operating arrangements mitigate the restrictions (whether in whole or in part) that would otherwise apply to the **User** under this Clause 10 for all **Settlement Periods** or parts thereof falling within the **Outage Period** or period of reduced circuit capability.

10.17 In the event that the **GB Transmission System** conditions subsequently change such that the conditions required for a design variation under the **GB SQSS** are no longer met then **The Company** shall be entitled to revise Clause 1, this Clause 10 and the **Outage Conditions** as necessary to ensure that such **GB SQSS** conditions continue to be met.]

11. TERM

11. Subject to the provisions for earlier termination set out in the CUSC this Bilateral Connection Agreement shall continue until the User's Equipment is Disconnected from the GB Transmission System at the Connection Site in accordance with Section 5 of the CUSC.

12. VARIATIONS

- 12.1.1 Subject to Clause <u>10.2</u>, <u>10.3</u><u>12.2</u>, <u>12.3</u> and <u>10.4</u><u>12</u>. below, no variation to this **Bilateral Connection Agreement** shall be effective unless made in writing and signed by or on behalf of both **The Company** and the **User**.
- 12.2 The Company and the User shall effect any amendment required to be made to this Bilateral Connection Agreement by the Authority as a result of a change in the CUSC or the Transmission Licence, an order or direction made pursuant to the Act or a Licence, or as a result of settling any of the terms hereof. The User hereby authorises and instructs The Company to make any such amendment on its behalf and undertakes not to withdraw, qualify or revoke such authority or instruction at any time.
- 12.3 **The Company** has the right to vary Appendices A and B in accordance with this **Bilateral Connection Agreement** and the **CUSC** including any variation necessary to enable **The Company** to charge in accordance with the **Charging Statements**, or upon any change to the **Charging Statements**.
- 12.4 Appendices A and B shall be varied automatically to reflect any change to the Construction Works or Transmission Connection Assets as provided for in the Construction Agreement.

13. GENERAL PROVISIONS

Paragraph 6.10 and Paragraphs 6.12 to 6.26 of the **CUSC** are incorporated into this **Bilateral Connection Agreement** *mutatis mutandis*.

IN WITNESS WHEREOF the hands of the duly authorised representatives of the parties hereto at the date first above written

SIGNED BY)	
[name])	
for and on behalf of)	
National Grid Electricity Transmission	plc)

SIGNED BY)
[name])
for and on behalf of)
[User])

APPENDIX A

TRANSMISSION CONNECTION ASSET/CONNECTION SITE/NODE

Company:	[]
Connection Site:	[]
Node:	[]
Туре:	[]

Part 1 - Pre-Vesting Assets

Allocation Description	<u>Age</u> (As at [])	<u>Year</u>
Part 2 - Post-Vesting Assets		
Allocation Description	<u>Age</u> (As at [])	<u>Year</u>
Part 3 - Energy Metering Systems (*)		
Allocation Description	<u>Age</u>	<u>Year</u>

(*) FMS, Energy Metering Systems - The Electronics components have a 15 year replacement period. The Non-Electronics components have a 40 year replacement period.

All the above are inclusive of civil engineering works. At double busbar type substations, ownership ofmain and reserve busbars follows ownership of section switches.

Diagram Reference: []

[] Appendix Reference:

Agreement Reference: []

<u>Age</u> (As at [])

APPENDIX B

CONNECTION CHARGES/PAYMENT

Company: []

Connection Site: []

Туре: []

(1) Connection Charges

The Connection Charges set out below may be revised in accordance with the terms of this Bilateral Connection Agreement and/or the Construction Agreement and/or the CUSC and/or the Charging Statements

Part 1 - Pre-Vesting Assets

The Connection Charge for those assets extant at 31st March 1990 and specified in Appendix A Part 1 will be at an annual rate for the period [] to [] of \pounds [] where

Rate of Return	= []%
Rate of Return	- [] /0

Transmission Costs

Part A Site specific maintenance element	= £[]
Part B Other transmission costs element	= £[]

Part 2 - Post-Vesting Assets

The Connection Charge for those assets installed for this agreement after 31st March 1990 and specified in Appendix A Part 2 will be at an annual rate for the period [] to [] of \pounds [] where

<u>Rate of Return</u>	= []%
-----------------------	--------

Transmission Costs

Part A Site specific maintenance element = £[]

Part B Other transmission costs element

Part 3 - Energy Metering Systems

For FMS, Energy Metering Systems assets, installed for this agreement as specified in Appendix A Part 3 the Connection Charge will be at an annual rate for the period from [] to [] of \pounds []

Part 4 - Miscellaneous Charges

The miscellaneous charge shall be \pounds [] in respect of the period from [] to [] payable as an estimated indexed charge in twelve monthly instalments subject to adjustment in accordance with the terms of this Bilateral Connection Agreement and/or the CUSC and/or the Charging Statements

Part 5 - One-off / Transmission Charges

The transmission charge shall be \pounds [] in respect of the period from [] to [] payable as an estimated indexed charge in twelve monthly instalments subject to adjustment in accordance with the terms of this Bilateral Connection Agreement and/or the CUSC and/or the Charging Statements

(2) Payment

The Connection Charges for Parts 1 to 6 shall be payable in equal monthly instalments as specified in Paragraph 6.6 of the CUSC

Appendix Reference: []

APPENDIX C (Power Stations)

CONNECTION ENTRY CAPACITY, LOCAL CAPACITY NOMINATION AND TRANSMISSION ENTRY CAPACITY

Company:

Grid Supply Point/Connection Site/Node:

Part 1 Connection Entry Capacity

Connection Entry Capacity (CEC) expressed as an instantaneous MW figure

	CEC(MW)	
Power Station	[]
Generating Unit		
Genset 1	[]
Genset 2	[]
Genset 3	[]
Genset 4	[]

Part 2 Local Capacity Nomination

Local Capacity Nomination (LCN) expressed in average MW figure for the [Power Station] taken over a half hour settlement period.

<u>LCN (MW)</u> Power Station

Part 3 Transmission Entry Capacity

Transmission Entry Capacity (TEC) expressed in average MW taken over a half hour settlement period

ſ

TEC(MW) Power Station

]

Part 34 BM Units comprising Power Station

T_BMU 1	(Associated with Genset 1)
T_BMU 2	(Associated with Genset 2)
T_BMU 3	(Associated with Genset 3)
T_BMU 4	(Associated with Genset 4)
T_BMU SD-1	(Station Demand)
T_BMU AD-1	(Additional Trading Site Demand)

APPENDIX C (Interconnector Owners)

CONNECTION ENTRY CAPACITY AND TRANSMISSION ENTRY CAPACITY

Company:

Connection Site:

Part 1 Connection Entry Capacity

Connection Entry Capacity (CEC) expressed as an instantaneous MW figure

	CEC	C(MW)
Interconnector	[]

Part 2 Local Capacity Nomination

Local Capacity Nomination (LCN) expressed in average MW figure for the [Power Station] taken over a half hour settlement period.

<u>LCN (MW)</u> Interconnector

Part 3 Transmission Entry Capacity

Transmission Entry Capacity (TEC) expressed in average MW taken over a half hour settlement period

ſ

Interconnector

]

Part 34 BM Units comprising Interconnector

All BMU's starting with an identifier [I_FRA for example]. No need to list all individual BMU's

Part 45 Figure for the Purposes of CUSC Paragraph 9.6

SITE SPECIFIC TECHNICAL CONDITIONS:

AGREED BALANCING SERVICES

[NOT USED]

SITE SPECIFIC TECHNICAL CONDITIONS:

SPECIAL AUTOMATIC FACILITIES

SITE SPECIFIC TECHNICAL CONDITIONS:

PROTECTION AND CONTROL RELAY SETTINGS

FAULT CLEARANCE TIMES

SITE SPECIFIC TECHNICAL CONDITIONS:

LOAD SHEDDING FREQUENCY SENSITIVE RELAYS

END OF SCHEDULE 2 - EXHIBIT 1

SCHEDULE 2 - EXHIBIT 2

DATED []

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

and

[

] (2)

THE CONNECTION AND USE OF SYSTEM CODE

BILATERAL EMBEDDED GENERATION AGREEMENT

[USE OF SYSTEM FOR AN EMBEDDED POWER STATION]

[USE OF SYSTEM FOR A SMALL POWER STATION TRADING PARTY]

[DISTRIBUTION INTERCONNECTOR OWNER]

At [

Reference: []

]

CONTENTS

- 1. Definitions, Interpretation and Construction
- 2. Commencement
- 3. The Site of Connection to the Distribution System
- 4. Charging Date
- 5. Use of System
- 6. Credit Requirements
- 7. Entry Access Capacity
- 8. Compliance with Site Specific Technical Conditions
- 9. [Restrictions on Availability] (power stations with Design Variation only)
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- 12. General Provisions
- Appendix A The Site of Connection and Node
- Appendix B Charges and Payment

 Appendix C
 Local Capacity Nomination and
 Transmission Entry

Capacity

- Appendix F1 Site Specific Technical Conditions Balancing Services
- Appendix F2 [Not Used]
- Appendix F3 Site Specific Technical Conditions Special Automatic Facilities
- Appendix F4 Site Specific Technical Conditions Protection and Control Relay Settings, Fault Clearance Times
- Appendix F5 Site Specific Technical Conditions Other

THIS **BILATERAL EMBEDDED GENERATION AGREEMENT** is made on the [] day of [] 200[].

BETWEEN

- (1) National Grid Electricity Transmission plc a company registered in England with number 2366977 whose registered office is at 1-3 Strand, London, WC2N 5EH ("The Company", which expression shall include its successors and/or permitted assigns); and
- (2) [] a company registered in [] with number [] whose registered office is at [] ("**User**", which expression shall include its successors and/or permitted assigns).

WHEREAS

- (A) Pursuant to the Transmission Licence, The Company is required to prepare a Connection and Use of System Code (CUSC) setting out the terms of the arrangements for connection to and use of the GB Transmission System and the provision of certain Balancing Services.
- (B) The User has applied for use of the GB Transmission System and pursuant to the Transmission Licence The Company is required to offer terms for use of system.
- (C) The **User** has applied for use of the **GB Transmission System** in the capacity of [] as set out in Paragraph 1.2.4 of the **CUSC**.
- (D) As at the date hereof, The Company and the User are parties to the CUSC Framework Agreement (being an agreement by which the CUSC is made contractually binding between the parties). This Bilateral Embedded Generation Agreement is entered into pursuant to the CUSC and shall be read as being governed by it.

NOW IT IS HEREBY AGREED as follows:

1. DEFINITIONS, INTERPRETATION AND CONSTRUCTION

Unless the subject matter or context otherwise requires or is inconsistent therewith, terms and expressions defined in Section 911 of the **CUSC** have the same meanings, interpretations or constructions in this **Bilateral Embedded Generation Agreement**. [and the following terms and expressions shall have the meaning set out below:-

["**Circuit** []" [insert detailed description of circuit(s) affected by the design variation] (power station with **Design Variation** only);]

["Outage Conditions []" the unavailability of Circuit [] as a result of

(a) a [planned]/ [unplanned]/ [planned or unplanned] incident occurring directly on **Circuit []**; or

(b) **Circuit** [] requiring to be **Deenergised** for health and safety reasons to allow for the planned or unplanned availability of a circuit in the immediate vicinity of **Circuit** [] (power station with **Design Variation** only);]

["Outage Period" the period of time during which the Outage Conditions and/or reduced circuit capability apply (power station with Design Variation only).]]

["Notification of Circuit Restrictions" means the notification issued by The Company to the User in accordance with Clause [9.2] of this Bilateral Embedded Generation Agreement; (power station with Design Variation only)]

["Notification of Outage Conditions" means the notification issued by The Company to the User in accordance with Clause [9.4] of this Bilateral Embedded Generation Agreement; (power station with Design Variation only)]

["Notification of Restrictions on Availability" means a Notification of Outage Conditions and\or a Notification of Circuit Restrictions as applicable; (power station with Design Variation only)]

["Relevant Circuits" means [Circuit []]; (power station with Design Variation only)]

["**Transmission Related Agreement**" means the agreement of even date entered into between the parties for the provision of and payment for **Balancing Services** in respect of **Bid-Offer Acceptances**; (power station with **Design Variation** only)]

2. COMMENCEMENT

This **Bilateral Embedded Generation Agreement** shall commence on [____].

3. THE SITE OF CONNECTION TO THE DISTRIBUTION SYSTEM AND NODES

The [site of Connection/Node] of the Embedded Power Station [Distribution Interconnector] to the Distribution System to which the Use of System rights granted pursuant to this Bilateral Embedded Generation Agreement relates is more particularly described in Appendix A.

28.11.08

[The sites of **Connection** of the **Embedded Power Stations** [**Distribution Interconnector**] to the relevant **Distribution Systems** to which this **Bilateral Embedded Generation Agreement** relates are more particularly described in Appendix A.]

4. CHARGING DATE

The date from which **Use of System Charges** shall be payable by the **User** (including **One-Off Charges** where applicable) shall be **the Charging Date**].

5. USE OF SYSTEM

The right to use the **GB Transmission System** at the Node up to the <u>User's LCN</u> shall commence on and **Use of System Charges** shall be payable by the **User** from the date hereof.

6. CREDIT REQUIREMENTS

[The amount to be secured by the **User** from [date] is set out in the **Secured Amount Statement** issued from time to time and as varied from time to time in accordance with Section 3 of the **CUSC**.]

7. TRANSMISSION ENTRY CAPACITY

7.1 The Local Capacity Nomination and Transmission Entry Capacity of [at each of the] site[s] of ConnectionNode is [are] and the[ir] value[s] for the purposes of Paragraph 3.2 of the CUSC are specified in Appendix C.

7.2 Appendix C Part 3 will set out the **BM Unit Identifiers** of the **BM Units** registered at the **Connection Site** under the **Balancing and Settlement Code**. The **User** will provide **The Company** with the information needed to complete details of these **BM Unit Identifiers** as soon as practicable after the date hereof and thereafter in association with any request to modify the **Local Capacity Nomination and/or Transmission Entry Capacity** and **The Company** shall prepare and issue a revised Appendix C incorporating this information. The **User** shall notify **The Company** shall prepare and issue a revised Appendix C appendix C arevised Appendix C incorporating this information.

7.3 **The Company** shall monitor the **Users** compliance with its obligation relating to **Transmission Entry Capacity** Local Capacity Nomination in relation to the [site of Connection] against the sum of metered volumes of

the **BM Units** set out in Part 3 of Appendix C and submitted by the **User** for each **Settlement Period**.

8. COMPLIANCE WITH SITE SPECIFIC TECHNICAL CONDITIONS

The site specific technical conditions applying to [each of] the site[s] of **Connection** are set out in Appendices F1 to F5 to this **Bilateral Embedded Generation Agreement** as modified from time to time in accordance with Paragraph 6.9 of the **CUSC**.

9. [RESTRICTIONS ON AVAILABILITY (power stations with Design Variation only)

- 9.1 The design of the connection of the **Distribution System** (to which the **User** is to connect) to the **GB Transmission System** is when studied under Chapter 2 of the **GB SQSS** a variation to the connection design as provided for in that chapter. It is a condition of the **GB SQSS** that any variation to the connection design satisfies the criteria set out in paragraphs 2.15 to 2.18 (inclusive) of the **GB SQSS** and on that basis the following provisions shall apply.
- 9.2 **The Company** shall issue to the **User** a notice that advises the **User** of the occurrence of the **Outage Conditions** and where practicable the expected **Outage Period**. Such notice shall be issued:
- 9.2.1 In the event that the **Notification of Circuit Outage** relates to a **Planned Outage** on the **GB Transmission System**, where practicable, in accordance with **Grid Code** OC2 requirements; or
- 9.2.2 In the event that the Notification of Circuit Outage relates to something other than a Planned Outage on the GB Transmission System or it relates to a Planned Outage on the GB Transmission System but it is not practicable for such notice to be in accordance with Grid Code 0C2 requirements, as soon as reasonably practicable and The Company and the User shall agree as soon as practicable after the date hereof the method of such notification.
- 9.2.4 **The Company** shall promptly notify the **User** when the **Outage Period** will or has ceased.
- 9.3 **The Company** shall be entitled to revise the **Notification of Circuit Outage** given under Clause 9.2 above at any time.
- 9.4 The **User** will acknowledge receipt of such **Notification of Circuit Outage** and where practicable shall revise its **Output Useable** forecast for the affected **BM Unit** accordingly.

- 9.5 Following such **Notification of Circuit Outage** in accordance with Clause 9.2:
- 9.5.1 [(i) In respect of the Outage Conditions [], the User shall (i) ensure that the Maximum Export Limit and Maximum Import Limit for the BM Units relating to the Power Station reflects the outage of the Relevant Circuits and (ii) operate its Power Station to reflect the outage of the Relevant Circuits for all Settlement Periods or parts thereof falling within the Outage Period.]
- 9.5.2 In the event that the **User** does not comply with Clauses [] above, **The Company** shall issue **Bid-Offer Acceptances** to the **User** to reduce the export from and/or import to the affected **BM Unit** so that the effect is as if the **User** had complied with the relevant Clause, and the provisions of the **Transmission Related Agreement** shall apply.
- 9.6 The Company shall issue to the User a notice that advises the User of the occurrence of an event leading to a reduced circuit capability of Circuit [] and where practicable the expected Outage Period. Such notice (including any revision) shall be issued:
- 9.6.1 In the event that the **Notification of Circuit Restriction** relates to a **Planned Outage** on the **GB Transmission System**, where practicable, in accordance with **Grid Code** OC2 requirements; or
- 9.6.2 In the event that the Notification of Circuit Restriction relates to something other than a Planned Outage on the GB Transmission System or relates to a Planned Outage on the GB Transmission System but it is not practicable for such notice to be in accordance with Grid Code OC2 requirements, as soon as reasonably practicable and The Company and the User shall agree as soon as practicable after the date hereof the means of such notification.
- 9.6.3 **The Company** shall promptly notify the **User** when the period of reduced circuit capability will or has ceased.
- 9.7 **The Company** shall be entitled to revise the **Notification of Circuit Restriction** given under Clause 9.6 above at any time.
- 9.8 Following such **Notification of Circuit Restriction** in accordance with Clause 9.6:
- 9.8.1 [(i) In respect of the reduction in capability of Circuit [], the User shall (i) ensure that the Maximum Export Limit and Maximum Import Limit for the BM Units relating to the Power Station reflects the reduction in capability of the Relevant Circuits and (ii) operate its Power Station to reflect the reduction in capability of the Relevant Circuits for all Settlement Periods or parts thereof falling within the Outage Period.]

- 9.8.2 In the event that the **User** does not comply with Clauses [] above, **The Company** shall issue **Bid-Offer Acceptances** to the **User** to reduce the export from and/or import to the affected **BM Unit** so that the effect is as if the **User** had complied with the relevant Clause, and the provisions of the **Transmission Related Agreement** shall apply.
- 9.9 Where the **User** becomes aware or is notified by **The Company** of any breach of Clause 9.5 or Clause 9.8 above the **User** shall forthwith take all reasonable steps to comply with the provisions of that Clause.
- 9.10 Where the **User** breaches in whole or in part the provisions of Clause 9.5 or Clause 9.8 above, the User shall at The Company's request explain to **The Company's** satisfaction (acting reasonably) the reason for the breach and demonstrate to The Company's satisfaction that appropriate steps have been taken to ensure that such breach will not reoccur. In the event that the **User** does not do this **The Company** may give notice to the User reducing the Transmission Entry Capacity of the Connection Site and Appendix C of this Bilateral Embedded Generation Agreement shall be varied accordingly. This Transmission Entry Capacity shall apply until such time as the User has explained to **The Company's** reasonable satisfaction the reason for the breach and has demonstrated that appropriate steps have been taken to ensure that such breach will not reoccur and Appendix C shall be automatically amended thereafter to reflect the reinstatement of the Transmission Entry Capacity.
- 9.11 If within 3 months of a breach of Clause 9.5 or Clause 9.8 above which entitled **The Company** to take action under Clause 9.10 above, the **User** has still failed to provide the explanation and\or demonstration required by **The Company** under Clause 9.10 then **The Company** may treat such breach as an **Event of Default** for the purposes of Section 5 of the **CUSC** and following such breach may give notice of termination to the **User** whereupon this **Bilateral Embedded Generation Agreement** shall terminate and the provisions of **CUSC** Paragraph 5.4.7 shall apply.
- 9.12 For the avoidance of doubt any **Deenergisation** resulting from the **Outage Conditions** as set out in the relevant **Notification of Restrictions on Availability** constitutes an **Allowed Interruption**.
- 9.13.1 The Company and the User shall act in accordance with Good Industry Practice to minimise so far as reasonably practicable the occurrence and duration of (i) the Outage Conditions and (ii) an Event leading to reduced circuit capability of the relevant circuits. The Company and the User will, recognising the effect of the Outage Conditions and the reduced circuit capability on the User's operations, coordinate the Outage Conditions and the reduced circuit

capability on the **GB Transmission System** (where they occur as a result of a Planned Outage) and the **User's Plant** and **Apparatus** in accordance with **Good Industry Practice** and to the extent practicable. **Company** and the **User** acknowledge however that even where **Planned Outages** are coordinated and agreed that **The Company** and\or the **User** may need to cancel or change such **Planned Outage**.

- 9.13.2 **The Company** and the **User** hereby acknowledge and agree that, where practicable, alternative operating arrangements shall be implemented to minimise the effect of **Outage Conditions** [, including, but not limited to [describe potential arrangements]]. In the event that **The Company** and the **User** implement alternative operating arrangements in respect of an **Outage Condition**, the provisions of Clause 9.5 and Clause 9.8 shall not apply to the extent that the alternative operating arrangements mitigate the restrictions (whether in whole or in part) that would otherwise apply to the **User** under this Clause 9 for all **Settlement Periods** or parts thereof falling within the **Outage Period**.
- 9.14 In the event that the **GB Transmission System** conditions subsequently change such that the conditions required for a design variation under the **GB SQSS** are no longer met then **The Company** shall be entitled to revise Clause 1, this Clause 9 and the **Outage Conditions** as necessary to ensure that such **GB SQSS** conditions continue to be met.]

10. TERM

Subject to the provisions for earlier termination set out in the CUSC, this **Bilateral Embedded Generation Agreement** shall continue until all of the **User's** equipment [or **Equipment** for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**] is **Disconnected** from the relevant **Distribution System** at the site[s] of **Connection** as provided in Section 5 of the **CUSC**.

11. VARIATIONS

- 11.1 Subject to 11.2 and 11.3, no variation to this **Bilateral Embedded Generation Agreement** shall be effective unless made in writing and signed by or on behalf of both **The Company** and the **User**.
- 11.2 **The Company** and the **User** shall effect any amendment required to be made to this **Bilateral Embedded Generation Agreement** by the **Authority** as a result of a change in the **CUSC** or the **Transmission Licence**, an order or direction made pursuant to the **Act** or a **Licence**, or as a result of settling any of the terms hereof. The **User** hereby authorises and instructs **The Company** to make any such amendment

on its behalf and undertakes not to withdraw, qualify or revoke such authority or instruction at any time.

11.3 **The Company** has the right to vary Appendix B in accordance with this **Bilateral Embedded Generation Agreement** and the **CUSC** including any variation necessary to enable **The Company** to charge in accordance with the **Charging Statements** or upon any change to the **Charging Statements**.

12. GENERAL PROVISIONS

Paragraph 6.10 and Paragraphs 6.12 to 6.26 of the **CUSC** are incorporated into this **Bilateral Embedded Generation Agreement** *mutatis mutandis*.

)

IN WITNESS WHEREOF the hands of the duly authorised representatives of the parties hereto at the date first above written

SIGNED BY)
[name])
for and on behalf of)
National Grid Electricity Transmission	plc

SIGNED BY)
[name])
for and on behalf of)
[User])

APPENDIX A

THE SITE OF CONNECTION / NODE

:

1. SITE[s] OF CONNECTION

Company

Site[s] of Connection

:

Node

Owner[s] / Operator[s] of Distribution System:

APPENDIX B

CHARGES AND PAYMENT

Company :

Site of Connection:

- 1. PART 1: ONE-OFF CHARGES
- 2. PART 2: MISCELLANEOUS CHARGE(S)

APPENDIX C

LOCAL CAPACITY NOMINATION AND TRANSMISSION ENTRY CAPACITY

Part 1 Local Capacity Nomination (LCN)

Local Capacity Nomination (LCN) expressed in average MW figure for the [Power Station] taken over a half hour settlement period.

LCN (MW) Power Station

Part 2 Transmission Entry Capacity

Transmission Entry Capacity (TEC) expressed in average MW taken over a half hour settlement period

	TEC((MW)
Power Station	[]

Part 23 BM Units comprising Power Station

E_BMU 1	(Associated with Genset 1)
E_BMU 2	(Associated with Genset 2)
E_BMU 3	(Associated with Genset 3)
E_BMU 4	(Associated with Genset 4)
E_BMU SD-1	(Station Demand) if applicable
E_BMU AD-1	(Additional Trading Site Demand) if applicable
E_BMU 4 E_BMU SD-1	Associated with Genset 4) (Station Demand) if applicable

SITE SPECIFIC TECHNICAL CONDITIONS:

AGREED BALANCING SERVICES

[NOT USED]

SITE SPECIFIC TECHNICAL CONDITIONS:

SPECIAL AUTOMATIC FACILITIES

SITE SPECIFIC TECHNICAL CONDITIONS: PROTECTION

AND CONTROL RELAY SETTINGS

FAULT CLEARANCE TIMES

SITE SPECIFIC TECHNICAL CONDITIONS:

<u>OTHER</u>

END OF SCHEDULE 2 - EXHIBIT 2

Sec 11 Proposed New and Amended Defined Terms

"2 Day Ahead SO	a one day access product to be applied for by a User two days in
Release":	advance of the SO Release Day in accordance with the procedure in Paragraph 7 of Appendix 3 to Section 3 of the CUSC ;
"2 Day Ahead SO Release Acceptance"	the acceptance issued by The Company to a User in accordance with Paragraph 7 of Appendix 3 to Section 3 of the CUSC ;
"2 Day Ahead SO Release Auction":	the process whereby a User may apply for 2 Day Ahead SO Release pursuant to Paragraph 7 of Appendix 3 to Section 3 of the CUSC ;
"2 Day Ahead SO Release Bid form"	the form by which to request 2 Day Ahead SO Release as set out in the SO ST Release Methodology ;
"2 Day Ahead SO Release Charge":	the charge payable by a User pursuant to Paragraph 7.2.5(a) of Appendix 3 to Section 3 of the CUSC as calculated in accordance with the SO ST Release Methodology and the Statement of the Use of System Charging Methodology ;
"2 Day SO Release Period":	the SO Release Day for which The Company has accepted a bid for 2 Day Ahead SO Release ;
"5 Week Ahead SO Release":	a one week access product to be applied for by a User 5 weeks in advance of the 5 Week Ahead SO Release Access Period in accordance with the procedure in Paragraph 8 of Appendix 3 to Section 3 of the CUSC ;
"5 Week Ahead SO Release Acceptance"	the acceptance issued by The Company to a User in accordance with Paragraph 8 of Appendix 3 to Section 3 of the CUSC in respect of a specified 5 Week Ahead SO Release Access Period ;
"5 Week Ahead SO Release Period":	the week for which The Company has accepted a bid for 5 Week Ahead SO Release , such period starting at 05.00 am on the Wednesday of Week 6 and finishing at 04.59 am on the Wednesday of Week 7;
"5 Week Ahead SO Release Auction":	the process whereby a User may apply for 5 Week Ahead SO Release pursuant to Paragraph 8 of Appendix 3 to Section 3 of the CUSC ;
"5 Week Ahead SO Release Bid form"	the form by which to request 5 Week Ahead SO Release as set out in the SO ST Release Methodology ;
"5 Week Ahead SO Release Bid Form":	the form by which to request 5 Week Ahead SO Release as set out in the SO ST Release Methodology ;
"5 Week Ahead SO Release Charge":	the charge payable by a User pursuant to Paragraph 8.2.5(a) of Appendix 3 to Section 3 of the CUSC as calculated in accordance with the SO ST Release Methodology and the Statement of the Use of System Charging Methodology ;
"Access Capacity":	the sum of a User's TEC and Short Term Access Products (if any);

"Actual Overrun	As defined in Section 2 Annendix 2 Decorrent 0.0.5.1
	As defined in Section 3 Appendix 3 Paragraph 9.2.5.1;
Amount"	
"Buy Back Price"	the price for such as set out in a User's 2 Day Ahead SO Release
	Bid Form or 5 Week Ahead SO Release Bid Form;
	the weeks for which a linear is offered OLDTEO.
CLDTEC Access	the weeks for which a User is offered CLDTEC ;
Period":	
	her shows much be been the mean the Development of C.C. o. (
"CLDTEC Charge"	the charge payable by a User pursuant to Paragraph 5.5.2 of
	Appendix 3 to Section 3 of the CUSC as calculated in accordance
	with the SO ST Release Methodology and the Statement of the
	Use of System Charging Methodology;
"CLDTEC Offer":	on offer mode by The Company to a Uppr in accordance with
CLDTEC Oller:	an offer made by The Company to a User in accordance with
	Paragraph 5 of Appendix 3 to Section 3 of the CUSC for Use of
	System by utilising CLDTEC for a specified CLDTEC Period;
"CLDTEC Period":	the period in consecutive whole weeks for which a User has been
CEDIEC Fendu .	offered a CLDTEC Offer;
"CLDTEC Profile":	a weekly profile in MW of The Company's assessment of the MW
	capacity that is available to a User for the CLDTEC Period (not
	exceeding the maximum level in the CLDTEC Request);
	exceeding the maximum level in the CLDTEC nequest,
"CLDTEC Request":	is an application made by a User for a CLDTEC Offer using a
orbiteo nequest .	CLDTEC Request Form;
"CLDTEC Request	the non refundable fee to be paid by the User to The Company as
Fee"	detailed in the Charging Statements ;
"CLDTEC Request	the form by which to request CLDTEC as set out in the SO ST
Form":	Release Methodology:
"Close of Bids":	means in relation to :
	(a) a 2 Day Ahead SO Release Bid Form, 16.00 on the day that is
	2 days ahead of the start of the 2 Day Ahead SO Release Access
	Period (D-2); and
	(b) a 5 Week Abaad CO Balance Bid Ermando oo haaraa dh
	(b) a 5 Week Ahead SO Release Bid Form , 16.00 hours on the
	Wednesday of the week that is 5 weeks ahead of the start of the 5
	Week Ahead SO Release Access Period (Week 1) and where
	Public Holiday, 16.00 hours on the first Business Day following
	such Wednesday.
"Commercial Limited	a weekly-based (Monday to Monday) access product offering a User
Duration TEC" or	a minimum of one week access to the GB Transmission System in
"CLDTEC":	accordance with Paragraph 5 of Appendix 3 to Section 3 of the
	CUSC:
"Effective LCN	the date as defined in Paragraph 1.4.3 of Appendix 3 of Section 3 of
Decrease Date":	the CUSC;
Donating Sharing User	Donating Sharing User
"Entry Overrun	the element of Use of System Charges payable by a User in

Charges":	respect of Entry Overrun.
"Entry Overrun":	means the ability of a User to export power on to the GB Transmission System above its Access Capacity up to its LCN in accordance with Paragraph 9 of Appendix 3 to Section 3 of the CUSC.
"Final Entry Overrun Reconciliation Statement"	as defined in Section 3 Appendix 3 Paragraph 9.2.5.1;
"Generation Circuit"	as defined in the GBSQSS;
"Initial Entry Overrun Reconciliation Statement"	as defined in Section 3 Appendix 3 Paragraph 9.2.5.1;
"LCN Decrease Notice Period":	the notice period required pursuant to Paragraph 1.4.1 of Appendix 3 to Section 3 of the CUSC ;
"LCN/TEC Register"	The register set up by The Company pursuant to Section 3 Appendix 3 Paragraph 2.4;
"LCN Transmission Reinforcement Works":	those Transmission Reinforcement Works that are required from the Node to connect in to a MITS Substation , inclusive of substation works a substation with more than 4 Transmission Circuits connecting at the substation.
"Local Capacity Nomination" or "LCN":	the station capacity (in whole MW) being the maximum figure at which a User can export power onto the GB Transmission System at a Node , and which, in relation to a User acting in the category of a Power Station directly connected to the GB Transmission System , must never exceed it's Connection Entry Capacity ;
"MITS Substation	means a substation at a Grid Supply Point with 2 or more Transmission Circuits connecting at the substation.
"Node":	Shall mean: (a) in the case of a User acting in the category of a Power Station directly connected to the GB Transmission System, the Connection Site specified in a User's Bilateral Connection Agreement; and (b) in the case of a User acting in the category of an Embedded Power Station, the Grid Supply Point that can be reasonably associated with the Embedded generation site specified in a User's Bilateral Embedded Generation Agreement.
"Notional Overrun Amount"	s defined in Section 3 Appendix 3 Paragraph 9.2.5.1;
"Public Holiday"	Any day designated as such pursuant to the 1971 Banking and Financial Dealings Act.
Receiving Sharing User	the User proposing to share with the Donating Sharing User
"Shared Access Capacity Notification":	the notification pursuant to Paragraph 11.5 of Appendix 3 to Section 3 of the CUSC by the Sharing Users to The Company to accept the Sharing Exchange Rate Offer ;
"Shared Access Capacity Rate Request	the non refundable fee to be paid by a User to The Company as when requesting The Company to carry out a Shared Access

—	
Fee":	Capacity Rate Request pursuant to Paragraph 11 of Appendix 3 to Section 3 of the CUSC and specified in the Charging Statements ;
"Shared Access	a joint request from the Sharing User's to calculate the Shared
Capacity Rate	Access Capacity Rate and made by use of the Shared Access
Request":	Capacity Rate Request Form;
"Shared Access	the factor used to calculate the MW from the Donating Sharing
Capacity Rate":	User to the Receiving Sharing User;
"Sharing Period"	the period in consecutive whole weeks for which a User has been
	offered a Sharing Exchange Rate Offer;
"Sharing Power	those Power Stations identified in a Shared Access Capacity
Stations"	Rate Request and the subject of any resulting Shared Access
	Capacity Notification;
"Sharing Users"	the Donating Sharing User and Receiving Sharing Use ;
"Short Term Access	any of the following products: the 2 Day Ahead SO Release , the 5
Products":	Week Ahead SO Release, CLDTEC, STTEC, LDTEC and
	Temporary TEC;
"Short Term Access	the element of Use of System Charges payable by a User arising
Products Charge":	out of a User's Use of System by means of a Short Term Access Product:
"CO Polosos Dou"	the day starting at 05.00 am on day D and finishing at 04.59 am;
"SO Release Day"	
"SO Release	the Transmission Related Agreement that The Company and a
Transmission Related	User must have entered into prior to such User including a Buy
Agreement"	Back Price in a 2 Day Ahead SO Release Bid Form or a 5 Week Ahead SO Release Bid Form;
"SO ST Release	the methodology to be prepared by The Company in accordance
Methodology":	with Paragraph 6 of Appendix 3 to Section 3 of the CUSC with
	respect to 5 Week Ahead SO Release Auctions and 2 Day Ahead
	SO Release Auctions and CLDTEC;
"Temporary TEC":	Temporary Donated TEC less Temporary Received TEC;
"Transmission Circuit"	as defined in the GBSQSS ;

Proposed Amendments to Existing Defined Terms

"TEC Register"	shall be deleted
"Operational Notification":	the notice of that name given to the User by The Company under Paragraphs 1.5.5 or 3.2.6 7 of the CUSC or under a Construction Agreement ;
Various – "Exchange rate Requests", "LDTEC", "STECC", "TEC Increase Request" and "Temporary TEC Exchanges"	the references to Section 3 and Paragraphs within Section 3 where used in the definitions of and Exhibits relating to these shall be replaced with the corresponding references in Section 3 Appendix 3.
"Use of System Payment Date":	the date for payment of Use of System Charges, Short Term Access Products Charges and Entry Overrun Charges;

CUSC - EXHIBIT B

THE CONNECTION AND USE OF SYSTEM CODE CONNECTION APPLICATION

DIRECTLY CONNECTED POWER STATION NON EMBEDDED CUSTOMER DISTRIBUTION SYSTEM DIRECTLY CONNECTED TO THE GB TRANSMISSION SYSTEM

PLEASE STUDY THE FOLLOWING NOTES BEFORE COMPLETING AND SIGNING THE APPLICATION FORM.

Please note that certain terms used in the application form are defined in the Interpretation and Definitions (contained in Section 11 to the **CUSC**) and when this occurs the expressions have capital letters at the beginning of each word and are in bold. If the **Applicant** has any queries regarding this application or any related matters then the **Applicant** is recommended to contact **The Company**¹ where our staff will be pleased to help.

- The Company (National Grid Electricity Transmission plc) requires the information requested in this application form for the purpose of preparing an Offer (the "Offer") to enter into an agreement for connection to and in the case of a directly connected power station, use of the GB Transmission System. It is essential that the Applicant supplies all information requested in the application form and that every effort should be made to ensure that such information is accurate.
- 2. Where **The Company** considers that any information provided by the **Applicant** is incomplete or unclear, or further information is required, the **Applicant** will be requested to provide further information or clarification. The provision/clarification of this information may impact on **The Company's** ability to commence preparation of an **Offer**.
- 3. Should there be any change in the information provided by the **Applicant** then the **Applicant** should immediately inform **The Company** of such a change. Where this is a change in the information provided for Sections B to D then the **Applicant** should contact **The Company** to see if such a change can be accommodated as it is unlikely that material changes could be accommodated. If **The Company** cannot accommodate such a change bearing in mind the timescales within which the **Offer** must be made then the application will be processed on the original information although it is open to the **Applicant** to withdraw the application.
- 4. **The Company** shall charge the **Applicant**, and the **Applicant** shall pay to **The Company**. **The Company's** Engineering Charges in relation to the application. A fee will be charged by **The Company** in accordance with the **Charging Statements**. No application will be considered until such payment has been received.
- 5. The effective date upon which the application is made shall be the later of the date when **The Company** has received the application fee pursuant to paragraph 4 above or the date when **The Company** is reasonably satisfied that the **Applicant** has completed Sections A-D. **The Company** shall notify the **Applicant** of such date.

¹ Customer Services, National Grid Electricity Transmission plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA (Telephone No. 01926 654634)

CUSC V1.8

- 6. The Company will make the Offer in accordance with the terms of Paragraphs 2.13, 6.9 (Modifications) and Paragraph 6.10 (New Connection Sites) of the CUSC and the Transmission Licence.
- 7. The Company will make the Offer as soon as is reasonably practicable and, in any event, within three (3) months of the effective date of the application or such later period as the Authority may agree. The Offer may, where it is necessary to carry out additional extensive system studies to evaluate more fully the impact of the proposed development, indicate the areas that require more detailed analysis. Before such additional studies are required, the Applicant shall indicate whether it wishes The Company to undertake the work necessary to proceed to make a revised Offer within the three (3) month period or, where relevant the timescale consented to by the Authority. To enable The Company to carry out any of the above mentioned necessary detailed system studies the Applicant may, at the request of The Company, be required to provide some or all of the Detailed Planning Data listed in Part 2 of the Appendix to the Planning Code which is part of the Grid Code.
- 8. In the course of processing the application it may be necessary for **The Company** to consult the appropriate **Public Distribution System Operator(s)** on matters of technical compatibility of the **GB Transmission System** with their **Distribution System(s)** or to consult the **Relevant Transmission Licensees** to establish the works required on the **GB Transmission System**. On grounds of commercial confidentiality **The Company** shall need authorisation for the release to the **Public Distribution System Operator(s)** or **Relevant Transmission Licensees** of certain information contained in the application. Any costs incurred by **The Company** in consulting the **Public Distribution System Operator(s)** or **Relevant Transmission Licensees** would be included in **The Company Charges** for the application. If it is found by the **Public Distribution System Operator(s)** and the **Applicant** to reach agreement in accordance with [Paragraph 6.10.3 of the **CUSC.]**
- In accordance with [Paragraph 6.30.3 of CUSC] The Company will need to disclose details of Bilateral Agreements entered into and shall need authorisation from the Applicant in respect of this.
- 10. If the **Applicant** is not already a **CUSC Party** the **Applicant** will be required as part of this application form to undertake that he will comply with the provisions of the **Grid Code** for the time being in force. Copies of the **Grid Code** and the **CUSC** are available on **The Company's Website**² and the **Applicant** is advised to study them carefully. **Data** submitted pursuant to this application shall be deemed submitted pursuant to the **Grid Code**.
- 11. The Company's Offer will be based upon its standard form terms of Connection Offer and the Charging Statements issued by The Company under Standard Conditions C4 and C6 of the Transmission Licence. The Applicant should bear in mind The Company's standard form terms of Offer when making this application.

² www.nationalgrid.com/uk/electricity

CUSC V1.8

- 12. In particular, **The Company** prepares **Offers** upon the basis that each party will design, construct, install, control, operate and maintain, in the case of the **User**, the **Plant** and **Apparatus** which he will own and, in the case of **The Company**, **Transmission Plant** and **Transmission Apparatus** usually but not necessarily applying the ownership rules set out in Paragraph 2.12 of the **CUSC** (Principles of Ownership). If the **Applicant** wishes **The Company** to carry out any of these matters on the **Applicant's** behalf please contact **The Company³** for further details.
- 13. Applicants of a type set out in Grid Code CC 8.1, Generators and DC Converter Station Owners, should appreciate that they will be required to perform Mandatory Ancillary Services to ensure that System Operational Standards can be achieved. This requirement may have implications towards Plant specification. You should be satisfied that before an application is made that your intended Plant design can meet the requirements.
- 14. Under Special Condition M of the Transmission Licence **The Company** has additional requirements in respect of information on **Offers** where an **Applicant** has applied for connections in Scotland as well as in England and Wales and the **Applicant** doesn't intend to connect at all locations, but intends to choose which location or locations to connect at on the basis of the offers it receives. Question 5 in Section A is intended to assist **The Company** in early identification of this situation arising. **The Company's Website**⁴ contains a statement that describes the means by which **The Company** shall ensure compliance with Special Condition M of its **Transmission Licence**.
- 15. Applicants have the option to request a Connection Offer on the basis of a Design Variation. In requesting such an Offer, the Applicant acknowledges that the connection design (which provides for connection to the GB Transmission System) will fail to satisfy the deterministic criteria detailed in paragraphs 2.5 to 2.13 of the GB SQSS. In making such an Offer, in accordance with its obligations under Paragraphs 2.13.2 and 2.13.7 of CUSC, The Company may include Restrictions on Availability. If Applicants require further assistance on this option they are recommended to contact The Company before completing this application form.
- 16. The **Applicant** has the ability to pay a fixed price application fee in respect of their application or pay the actual costs incurred (variable price application fee). The fixed price application fee is derived from analysis of historical costs of similar applications. The variable price application fee is based on an advance of the Transmission Licensee's Engineering and out of pocket expenses and will vary according to the size of the scheme and the amount of work involved. The **Applicant** is requested to indicate their preferred basis of application fee in Section A question 4. The **Applicant** is advised that further information can be obtained from the **Charging Statements** which can be found on **The Company's Website**⁵.
- 17. Applicants have the option to request a Connection Offer on the basis of the Local Capacity Nomination only or the Local Capacity Nomination and Transmission Entry Capacity and for Transmission Entry Capacity to be provided in the same timescale or subsequent to the Local Capacity Nomination. Please note the Local Capacity Nomination is a prerequirement for TEC..

³ Customer Services, National Grid Electricity Transmission plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA (Telephone No. 01926 654634)

⁴ <u>www.nationalgrid.com/uk/electricity</u>

⁵ <u>www.nationalgrid.com/uk/electricity</u>

- 18. 17. [The Company will provide an Offer for the Local Capacity Nomination or Transmission Entry Capacity based upon the GB Security and Quality of Supply Standards (GBSQSS). The criteria presented in the GBSQSS represent the minimum requirements for the planning and operation of the GB Transmission System. The GBSQSS allows for a generation or demand Applicant to request a variation to the connection design. For example, such a connection design variation may be used to take account of the particular characteristics of a power station, the nature of connection of embedded generation or particular load cycles.
- 19. 18.—Any variation to connection design must not reduce the security of the MITS (Main Interconnected Transmission System) to below the minimum planning standard, result in any additional costs to any particular customer and compromise and any GB transmission licensee's ability to meet other statutory obligations or licence obligations. Further details of these conditions and standards can be found on The Company's Website⁶. Note: Need to consider application of this]
- 20. 19. Please complete this application form in black print and return it together with the appropriate application fee to the Customer Services Manager, National Grid Electricity Transmission plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA (Telephone No. 01926 654634). In addition to returning the application form to the Customer Services Manager an electronic copy of the application form may be e-mailed to The Company at camdata@uk.ngrid.com
- 20. For the most up to date contact details applicants are advised to visit The Company's Website⁵.

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

SECTION A. DETAILS OF APPLICANT (in respect of this application)

1. Registered Company

Name:....

Address (of Registered Office in the case of a Company)

	Company Number:
	Parent Company Name (if applicable):
1	Company Secretary or person to receive CUSC notices
	Name:
	Email:
	Telephone:
	Fax:
	Commercial Contact/Agent (person to receive Offer if different from Company Secretary or person to receive CUSC notices identified in 2 above)
	Name:
	Title:
,	Address:
	v1.8–2 4 th May 2008
	<u>CAP 161 – 163 – Version 1 – 28 November 2008</u>

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

Email:	
Telephone:	
Fax:	

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

4. Please identify which application fee basis you wish to use for this application.

Fixed price application fee []

Variable price application fee []

- 5. If this is an application for connection to the **GB Transmission System** in England and Wales please complete 5a. If this is an application for connection to the **GB Transmission System** in Scotland please complete 5b.
- 5a. Have you made any applications for connection to the **GB Transmission System** in Scotland which are being processed prior to **Offer** by **The Company** or where an **Offer** has been made that **Offer** has not yet been accepted by you but remains open for acceptance?

If so, are such applications intended as alternatives to this one i.e. you intend to choose which of this or those other applications to proceed with on the basis of the offer made.

Yes – please list the applications.

No	[]	

Not sure []

(The Company will contact you to clarify)

5b. Have you made any applications for connection to the **GB Transmission System** in England and Wales which are being processed prior to **Offer** by **The Company** or where an **Offer** has been made that **Offer** has not yet been accepted by you but remains open for acceptance?

If so, are such applications intended as alternatives to this one i.e. you intend to choose which of this or those other applications to proceed with on the basis of the offer made.

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

Yes – please list the applications.

.....

No []

Not sure [] (The Company will contact you to clarify)

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

SECTION B. THE PROPOSED POINT OF CONNECTION

Please identify (preferably by reference to an extract from an Ordnance Survey Map) the intended location (the "Connection Site") of the Plant and Apparatus (the "User Development") which it is desired should be connected to the GB Transmission System and where the application is in respect of a proposed New Connection Site other than at an existing sub-station. Please specify the proposed location and name of the New Connection Site (which name should not be the same as or confusingly similar to the name of any other Connection Site) together with details of access to the Connection Site including from the nearest main road.

.....

2. Please provide a plan or plans of the proposed **Connection Site** indicating (so far as you are now able) the position of all buildings, structures, **Plant** and **Apparatus** and of all services located on the **Connection Site**.

.....

3. Give details of the intended legal estate in the **Connection Site** (to include leasehold and freehold interests and in the case of **Connection Sites** in Scotland legal interests and heritable or leasehold interests including servitudes or other real rights) in so far as you are aware.

.....

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

4. Who occupies the Connection Site in so far as you are aware? 5. If you believe that a new sub-station will be needed, please indicate by reference to the plan referred to in Section B question 2 above the Applicant's suggested location for it - giving dimensions of the area. If you are prepared to make available to The Company or, for Connection Sites in 6. Scotland, the Relevant Transmission Licensee the land necessary for the said sub-station, please set out brief proposals for their interest in it including (if relevant) such interest and the consideration to be paid for it. 7. Is space available on the Connection Site for working storage and accommodation areas for The Company contractors or, for Connection Sites in Scotland, the contractors of the Relevant Transmission Licensee? If so, please indicate by reference to the plan referred to in Section B question 2 above the location of such areas, giving the approximate dimensions of the same.

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

8. Please provide details (including copies of any surveys or reports) of the physical nature of land in which you have a legal estate or legal interest at the proposed **Connection Site** including the nature of the ground and the sub-soil.

.....

9. Please give details and provide copies of all existing relevant planning and other consents (statutory or otherwise) relating to the **Connection Site** and the **User Development** and/or details of any pending applications for the same.

.....

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

10. Is access to or use of the **Connection Site** for the purposes of installing, maintaining and operating **Plant** and **Apparatus** subject to any existing restrictions? If so, please give details.

.....

11. If you are aware of them, identify by reference to a plan (if possible) the owners and (if different) occupiers of the land adjoining the **Connection Site**. To the extent that you have information, give brief details of the owner's and occupier's estates and/or interests in such land.

.....

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

SECTION C. TECHNICAL INFORMATION

- 1. Summary of Application (brief description of plant to be connected):
- 2. Please provide full details of the proposed application together with the relevant **Standard Planning Data** as listed in Part 1 of the appendix to the **Planning Code** which are applicable to you. Note: the data concerned forms part of the **Planning Code** and **Data Registration Code**. **Applicants** should refer to these sections of the **Grid Code** for an explanation.
- 3. Please provide a copy of your **Safety Rules** if not already provided to **The Company**.

Included	[]	
Already provided	[]	
Will be provided la	ıter	[]

4. Please indicate if your plant may be able to provide (or you could consider providing) the following technical capability):-

а.	Generation from Auxiliary Units (Reserve Services)	[]
b.	Spinning Generation	[]
с.	Fast Start capability	[]
d.	Frequency Response above Mandatory requirements	[]
e.	Demand Reduction / Management	[]

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

f.	Reactive capability above Mandatory requirements	[]
g.	Synchronous Compensation	[]
h.	Black Start Capability	[]
i.	Emergency Maximum Generation	[]
j.	Intertrip	[]
k.	Other (please detail below)	[]

.....

The Company's Website⁵ provides more information on the terms it offers for such technical capability.

5. Please confirm your intended Connection Entry Capacity (MW)

Connection Site	[]
Generating Unit(s) (if app	olicable)	
Generating Unit 1	[]
Generating Unit 2	[]
Generating Unit 3	[]
Generating Unit 4	[]

Details of additional **Generating Units** are to be provided here

6. Please state the required Local Capacity NominationMW and Transmission Entry Capacity......MW

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

Please state the required LCN Period [whole Financial Years]

<u>Please state the required TEC Period [whole Financial Years]. Please note that where LCN</u> Works are identified this cannot be less than 8.

7. Please confirm if:

a. You would like an offer that is compliant with the deterministic criteria detailed in paragraphs 2.5 to 2.13 of the **GB SQSS** YES/NO

and\or

b. You would like an offer on the basis of a **Design Variation** YES/NO

If yes, please provide any information relevant to such an offer below.

.....

.....

.....

If yes, please confirm if you require information from **The Company** in relation to the probability of **Notification of Restrictions on**

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

Availability being issued

YES/NO

8. Do you wish to suggest an ownership boundary different from that set out in CUSC Paragraph 2.12?

Yes [] No []

If yes please give details:....

.....

9. Are you considering building any assets that would be identified as **Transmission Connection Assets**? If you indicate yes **The Company** will contact you to discuss further details.

Yes [] No []

10 Please confirm if you require LCN and TEC to be made available at the same time or whether you wish TEC to be provided after LCN and indicative timescales.

Same Time []

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

After []	
If after please give timescales	

11 Please confirm whether, in the event that in assessing the application The Company becomes aware that LCN could be provided earlier than TEC, you would wish the Offer to be made on the basis of LCN first and Tec later.

Yes []

<u>No []</u>

[Note: are the above necessary\practical?]

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

SECTION D. PROGRAMME

Please provide a suggested development and construction programme in bar chart form for the work necessary to install the **User Development** (not the **Transmission Connection Assets** needing to be installed) indicating the anticipated date when the connection will be required to be made and any other key dates such as back feed date.

If not already included in the above bar chart please provide details of when the **Applicant** expects to be completing the substantive works that lead to the completion of the following phases of the **User Development** or reach the following relevant key milestones below and other additional milestones as necessary (working backwards from expected connection date at 'year 0'). This information is expected to provide the anticipated project overview at the time of application:-

- Planning Application Submitted (Town & Country Planning*, S36,S37)
- Planning Consent Awarded
- Plant Ordered (i.e. **Power Station** or substation)
- Construction Started (site mobilisation)
- Construction Completed

Notes

* The consent for the **User's Power Station** granted under Section 36 of the Electricity Act or planning permission for the **User's Power Station** granted under the Town and Country Planning Act 1990 or any amendment thereto in England and Wales or the Town and Country Planning (Scotland) Act 1997 or any amendment thereto in Scotland.

CONNECTION APPLICATION

- 1. We hereby apply to connect our **Plant** and **Apparatus** to the **GB Transmission System** and for LCN [and TEC] at a New Connection Site. We agree to pay The Company's Engineering Charges on the terms specified in the **Notes** to the **Connection Application**.
- 2. We will promptly inform **The Company** of any change in the information given in this application as quickly as practicable after becoming aware of any such change.
- 3. If we are not already a **CUSC Party** we undertake for the purposes of this application to be bound by the terms of the **Grid Code** from time to time in force and to sign a **CUSC Accession Agreement**.
- 4. We authorise the release of certain information, on the grounds of commercial confidentiality, to the appropriate **Public Distribution System Operator(s)** or to the **Relevant Transmission Licensee**, should it be considered necessary.
- 5. We confirm that we:

meet The Company Credit Rating	[]
do not meet The Company Credit Rating.	[]

- 6. We confirm our agreement to the disclosure in the manner set out in Paragraph 6.30.3 of **CUSC** of the information specified in such Paragraph.
- 7. We confirm that we are applying in the category of:

Directly Connected Power Station	[]
Non-Embedded Customer	[]
Distribution System Directly Connected to the	
GB Transmission System	[]

[Please tick correct option].

SIGNED BY

.....

For and on behalf of the Applicant

Date:

END OF EXHIBIT B

CUSC - EXHIBIT C

THE CONNECTION AND USE OF SYSTEM CODE CONNECTION OFFER

DIRECTLY CONNECTED POWER STATIONS NON EMBEDDED CUSTOMER DISTRIBUTION SYSTEM DIRECTLY CONNECTED TO THE GB TRANSMISSION SYSTEM

The Company Secretary

Date: []

Dear Sirs

CONNECTION OFFER - [site] [reference]

Set out below is our offer for connection [and use of the **GB** Transmission System^{**}] at [site/substation]. Please note that certain expressions which are used in this **Offer** are defined in the Interpretation and Definitions (contained in Section 11 of the **CUSC**) and when this occurs the expressions have capital letters at the beginning of each word and are in bold.

- 1. <u>1.</u> The Company offers to enter into a Bilateral Connection Agreement and Construction Agreement covering the Connection Site, reference number [____]. If you are not already a CUSC Party you are required to enter into the enclosed CUSC Accession Agreement.
- 2. 2. It is a condition of this Offer that (i) you also enter into an Interface Agreement covering the Connection Site in a form to be agreed between the parties but substantially in the form of Exhibit O of the complete CUSC [and (ii) where required by The Company you enter into a Transmission Related Agreement (power station with Design Variation and/or Non Standard Boundary only)].
- 3. <u>3.</u> It is a condition of this **Offer** that the **Connection Site** is not a nominated site under the "NAECI" (the National Agreement for the Engineering Construction Industry) conditions and will not become one and any agreement for this site will be conditional upon this. In the event that this condition should not be met, **The Company** will be entitled to revise all the dates and charges contained in the **Bilateral Connection Agreement** and **Construction Agreement**.
- 4. <u>4.</u> The technical conditions with which you must comply as a term of this Offer are set out in the Grid Code. Additional technical conditions are set out in the Appendices to the Bilateral Connection Agreement. It is your responsibility to ensure that your equipment complies with the requirements of the relevant conditions.
- 5. The Offer is made on the basis of an LCN of [] [and a TEC of []]. [The LCN and TEC [are to be made available on the same date] [TEC is to be made available at a later date than LCN].
- 5. <u>6.</u> This Offer is open for acceptance according to the terms of Paragraph 2.13 of the CUSC and the Transmission Licence. Please note your right to make an application to the Authority to settle the terms of the offer pursuant to Standard Condition C9 of the Transmission Licence.
- 6. 7. Please note the provisions of Paragraph 6.10.4 of the CUSC in respect of interactive offers which, inter alia, allows **The Company** to vary the terms of this **Offer** if a **Connection** or **Modification Offer**, which interacts with this **Offer**, is accepted first. In terms of Paragraph 6.10.4 of the **CUSC**, **The Company** will advise you of another offer being made by **The Company**, which may interact with your **Offer**.

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Delete if connection only.

- 7.8. Please note that in accordance with the obligation in Paragraph 1.3.3 of the CUSC a Mandatory Services Agreement must be entered into not later than 6 months (or such lesser time as may be agreed) prior to the expected Commissioning Programme Commencement Date.
- 8.9. To accept this Offer, please sign and return the originals of the [CUSC Accession Agreement and] Bilateral Connection Agreement [,Construction Agreement] attached to this Offer as Sections A. The Company will then itself countersign these agreements and one original of each will be returned to you for your retention. The agreements are only effective in accordance with their terms once they have been countersigned by The Company.
- 9. <u>10.</u> All communications in relation to this **Offer** must, in the first instance, be directed to [description].

Yours faithfully

for and on behalf of The National Grid Company plc

SECTION A FORM OF BILATERAL CONNECTION AGREEMENT AND CONSTRUCTION AGREEMENT [AND CUSC ACCESSION AGREEMENT]

END OF EXHIBIT C

CUSC - EXHIBIT D

THE CONNECTION AND USE OF SYSTEM CODE USE OF SYSTEM APPLICATION

EMBEDDED GENERATOR DISTRIBUTION INTERCONNECTOR OWNER SMALL POWER STATION TRADING PARTY

PLEASE STUDY THE FOLLOWING NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM.

Please note that certain expressions which are used in this application form are defined in the Interpretation and Definitions (contained in Section 11 of the **CUSC**) and when this occurs the expressions have capital letters at the beginning of each word and are in bold. If the **Applicant** has any queries regarding this application or any related matters then the **Applicant** is recommended to contact **The Company**¹ where our staff will be pleased to help.

- 1. **The Company** requires the information requested in this application form for the purposes of preparing an **Offer** (the "**Offer**") to enter into an agreement for use of the **GB Transmission System**. It is essential that the **Applicant** should supply all information requested in this application form and that every effort should be made to ensure that such information should be accurate.
- 2. Where **The Company** considers that any information provided by the **Applicant** is incomplete or unclear, or further information is required, the **Applicant** will be requested to provide further information or clarification. The provision/clarification of this information may impact on **The Company's** ability to commence preparation of an **Offer**.
- 3. Should there be any change in the information provided by the **Applicant** immediately inform **The Company** of such a change. Where this is a change in the information provided for Sections B to D then the **Applicant** should inform **The Company** to see if such a change can be accommodated as it is unlikely that material changes could be accommodated. If **The Company** cannot accommodate such a change bearing in mind the timescales within which the **Offer** must be made then the application will be processed on the original information although it is open to the **Applicant** to withdraw the application.
- 4. **The Company** shall charge the **Applicant**, and the **Applicant** shall pay to **The Company**, **The Company's** Engineering Charges in relation to the application. A fee will be charged by **The Company** in accordance with the **Charging Statements**. No application will be considered until such payment has been received.
- 5. The effective date upon which the application is made shall be the later of the date when **The Company** has received the application fee pursuant to Paragraph 4 above or the date when **The Company** is reasonably satisfied that the **Applicant** has completed Sections A-D. **The Company** shall notify the **Applicant** of such date.
- 6. **The Company** will make the **Offer** in accordance with the terms of Paragraph 3.7 (**Use of System Application**) and [Paragraph 6.10] (**Modifications** and **New Connection Sites**) of the **CUSC** and the

¹ Customer Services, National Grid Electricity Transmission plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA (Telephone No. 01926 654634)

Transmission Licence.

- 7. The Company will make the Offer as soon as is reasonably practicable and, in any event, within 28 days of the effective date of the application or such later period as the Authority agrees to. The Offer may, where it is necessary to carry out additional extensive system studies to evaluate more fully the impact of the proposed development, indicate the areas that require more detailed analysis. Before such additional studies are required, the Applicant shall indicate whether it wishes The Company to undertake the work necessary to proceed to make a revised Offer within the 28 days period or, where relevant the timescale consented to by the Authority. To enable The Company to carry out any of the above mentioned necessary detailed system studies the Applicant may, at the request of The Company, be required to provide some or all of the Detailed Planning Data listed in Part 2 of the Appendix to the Planning Code which is part of the Grid Code.
- In the course of processing your application, it may be necessary for The 8. Company to consult the appropriate Public Distribution System Operator(s) on matters of technical compatibility of the GB Transmission System with their Distribution System(s) or to consult the Relevant Transmission Licensees to establish the works required on the **GB** Transmission System. On grounds of commercial confidentiality **The Company** shall need your authorisation to the release to the Public Distribution System Operator(s) or the Relevant Transmission Licensees of certain information contained in your Any costs incurred by The Company in consulting the application. Public Distribution System Operator(s) or Relevant Transmission Licensees would be included in The Company Charges for the If it is found by the Public Distribution System application. **Operator(s)** that any work is required on their **Distribution System(s)**, then it will be for the Public Distribution System Operator(s) and the Applicant to reach agreement in accordance with Paragraph 6.10.3 of the CUSC.
- 9. In accordance with [6.30.3] of **CUSC The Company** will need to disclose details of the **Bilateral Embedded Generation Agreement** entered into and shall need authorisation from the **Applicant** in respect of this.
- 10. If the **Applicant** is not already a **CUSC Party** the **Applicant** will be required as part of this application form to undertake that he will comply with the provisions of the **Grid Code** for the time being in force. Copies of the **Grid Code** and the **CUSC** are available on **The Company's Website**² and the **Applicant** is advised to study them carefully. **Data** submitted pursuant to this application shall be deemed submitted pursuant to the **Grid Code**.
- 11. **The Company's Offer** will be based to the extent appropriate upon its standard form terms for **Use of System Offer** and the **Charging**

² www.nationalgrid.com/uk/electricity

Statements issued by **The Company** under Standard Conditions C4 and C6. The **Applicant** should bear in mind **The Company** 's standard form terms of **Offer** when making this application.

- 12. In particular please note that **The Company** may require as a condition of the **Offer**, that the **Applicant's Plant** or **Apparatus** should meet or provide some or all of the technical requirements set out in the Appendices of the draft **Bilateral Embedded Generation Agreement** attached to **The Company's** standard form terms of **Offer** and may propose that the **Applicant's Plant** or **Apparatus** should have the capability to provide **Mandatory Ancillary Services**.
- 13. As provided for in **Grid Code** CC8.1 Generators and DC Converter station owner should appreciate that they will be required to perform **Mandatory Ancillary Services** to ensure that System Operational Standards can be achieved. This requirement may have implications towards plant specification. You should be satisfied before an application is made that your intended plant design can meet the requirements.

- 14. **The Applicant** has the ability to pay a fixed price application fee in respect of their application or pay the actual costs incurred (variable price application fee). The fixed price application fee is derived from analysis of historical costs of similar applications. The variable price application fee is based on an advance of the Transmission Licensee's Engineering and out of pocket expenses and will vary according to the size of the scheme and the amount of work involved. The **Applicant** is requested to indicate their preferred basis of application fee in Section A question 4. The **Applicant** is advised that further information can be obtained from the **Charging Statements** which can be found on **The Company's Website**³.
- 15. Applicants have the option to request a Use of System Offer on the basis of LCN only or LCN and TEC and for TEC to be provided in the same timescale or subsequent to LCN. Please note LCN is a pre-requirement for TEC.
- 16. 15. Applicants have the option to request a Connection Offer on the basis of a Design Variation. In requesting such an Offer, the Applicant acknowledges that the connection design (which provides for connection to the GB Transmission System) will fail to satisfy the deterministic criteria detailed in paragraphs 2.5 to 2.13 of the GB SQSS. In making such an Offer, in accordance with its obligations under Paragraphs 2.13.22.12.2 and 2.13.72.12.7 of CUSC. The Company may include Restrictions on Availability. If Applicants require further assistance on this option they are recommended to contact The Company before completing this application form.
- 17. 16. Please complete this application form in black print and return it together with the appropriate application fee to Customer Services Manager, National Grid Electricity Transmission plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA (Telephone No. 01926 65 4634). In addition to returning the application to the Customer Services Manager an electronic form may be e-mailed to The Company at camdata@uk.ngrid.com
- **18. 17.** For the most up to date contact details applicants are advised to contact **The Company Website**³.

³ www.nationalgrid.com/uk/electricity

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

SECTION A. DETAILS OF APPLICANT (in respect of this application)

1.	Registered Company
	Name:
	Address (of Registered Office in the case of a Company):
	Company Number:
	Parent Company Name (if applicable):
2.	Company Secretary or person to receive CUSC notices
	Name:
	Email:
	Telephone:
	Fax:
3.	Commercial Contact/Agent (person to receive Offer if different from Company Secretary or person to receive CUSC notices identified in 2 above)
	Name:
	Title:
	Address:
	Email:
	Telephone:
	Fax:

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PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

4. Please identify which application fee basis you wish to use for this application.

Fixed application fee []

Variable application fee []

- 5. If this is an application for connection to the **GB Transmission System** in England and Wales please complete 5a. If this is an application for connection to the **GB Transmission System** in Scotland please complete 5b.
- 5a. Have you made any applications for connection to the **GB Transmission System** in Scotland which are being processed prior to **Offer** by **The Company** or where an **Offer** has been made that **Offer** has not yet been accepted by you but remains open for acceptance?

If so, are such applications intended as alternatives to this one i.e. you intend to choose which of this or those other applications to proceed with on the basis of the offer made.

Yes – please list the applications.

.....

No []

Not sure []

(The Company will contact you to clarify)

5b. Have you made any applications for connection to the **GB Transmission System** in England and Wales which are being processed prior to **Offer** by **The Company** or where an **Offer** has been made that **Offer** has not yet been accepted by you but remains open for acceptance?

If so, are such applications intended as alternatives to this one i.e. you intend to choose which of this or those other applications to proceed with on the basis of the offer made.

Yes – please list the applications.

.....

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PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

No [] Not sure []

(The Company will contact you to clarify)

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

SECTION B: <u>THE PROPOSED SITE OF CONNECTION TO A</u> <u>DISTRIBUTION SYSTEM</u>

1. Please identify (preferably by reference to an extract from Ordnance Survey Map) the intended location of the **Plant** and **Apparatus** (the "User Development") which it is desired should be connected to the **Distribution System**.

2. If you believe that a new sub-station will be needed, please indicate by reference to a plan your suggested location for it.

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

SECTION C. <u>TECHNICAL INFORMATION</u>

1. Summary of Application (brief description of plant to be connected):

·····

- Please provide the data listed in Part 1 of the Appendix to the Planning Code which are applicable to you. Note: the data concerned forms part of the Planning Code and Data Registration Code. Applicants should refer to these sections of the Grid Code for an explanation. Further guidance is available from The Company on request.
- 3. Please provide a copy of your **Safety Rules** if not already provided to **The Company**.

Included[]Already provided[]Will be provided later[]

4. Please indicate if your plant may be able to provide (or you could consider providing) the following technical capability:-

a.	Generation from Auxiliary Units (Reserve Services)	[]
b.	Spinning Generation	[]
C.	Fast Start capability	[]
d.	Frequency Response above Mandatory requirements	[]
e.	Demand Reduction / Management	[]
f.	Reactive capability above Mandatory requirements	[]
g.	Synchronous Compensation	[]
h.	Black Start Capability	[]
i.	Emergency Maximum Generation	[]
j.	Intertrip	[]
k.	Other (please detail below)	[]

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

.....

The Company's Website⁴ provides more information on the terms it offers for such technical capability.

- 5. Please state the required **Transmission Entry Capacity**......MW
- **5.6.** Please confirm if:
- a. You would like an offer that is compliant with the deterministic criteria detailed in paragraphs 2.5 to 2.13 of the GB SQSS YES/NO

and\or

b. You would like an offer on the basis of a Design Variation YES/NO

If yes, please provide any information relevant to such an offer below.

.....

.....

.....

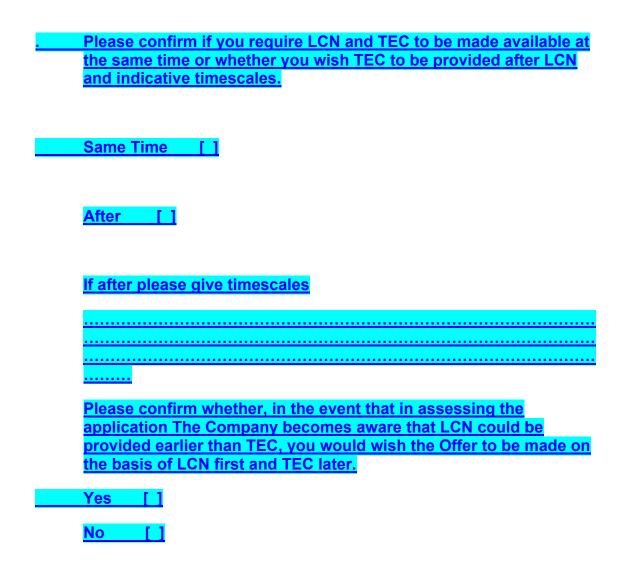
If yes, please confirm if you require information from The Company

in relation to the probability of Notification of Restrictions on

Availability being issued YES/NO

⁴ <u>http://www.nationalgrid.com/uk/Electricity/Balancing/services</u>

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM



PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

SECTION D. PROGRAMME

Please provide a suggested development and construction programme in bar chart form for the work necessary to install the **User Development** indicating the anticipated date when the connection will be required to be made and any other key dates such as back feed date.

If not already included in the above bar chart please provide details of when the **Applicant** expects to be completing the substantive works that lead to the completion of the following phases of the **User Development** or reach the following relevant key milestones below and other additional milestones as necessary (working backwards from expected connection date at 'year 0'). This information is expected to provide the anticipated project overview at the time of application:-

- Planning Application Submitted (Town & Country Planning*, S36,S37)
- Planning Consent Awarded
- Plant Ordered (i.e. **Power Station** or substation)
- Construction Started (site mobilisation)
- Construction Completed

Notes

* The consent for the **User's Power Station** granted under Section 36 of the Electricity Act or planning permission for the **User's Power Station** granted under the Town and Country Planning Act 1990 or any amendment thereto in England and Wales or the Town and Country Planning (Scotland) Act 1997 or any amendment thereto in Scotland.

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

USE OF SYSTEM APPLICATION

Please study the notes before completing and signing this application form.

1. We hereby apply to use the **GB Transmission System** from our connection to [] **Distribution System**.

2. We will promptly inform **The Company** of any change in the information given in this application as quickly as practicable after becoming aware of any such change.

3. If we are not already a **CUSC Party** we undertake for the purposes of this application to be bound by the terms of the **Grid Code** from time to time in force and to sign a **CUSC Accession Agreement**.

4. We authorise the release of certain information, on the grounds of commercial confidentiality, to the appropriate **Public Distribution System Operator(s)** or **Relevant Transmission Licensees** should it be considered necessary.

5. We confirm that we do/do not meet the **Approved Credit Rating** [and **The Company Credit Rating**].

- 6. We confirm our agreement to the disclosure in the manner set out in Paragraph 6.30.3 of **CUSC** of the information specified in such Paragraph.
- 7. We confirm that we are applying in the category of :

Embedded Generator	[]
Distribution Interconnector Owner	[]
Small Power Station Trading Party	[]
[Please tick correct option].	
SIGNED BY:	

For and on behalf of the **Applicant**

Date:....

END OF EXHIBIT D

PLEASE ENSURE THAT YOU HAVE STUDIED THE NOTES BEFORE COMPLETING AND SIGNING THIS APPLICATION FORM

CUSC – EXHIBIT E

THE CONNECTION AND USE OF SYSTEM CODE

USE OF SYSTEM OFFER

EMBEDDED GENERATOR DISTRIBUTION INTERCONNECTOR OWNER SMALL POWER STATION TRADING PARTY The Company Secretary

Date: []

Dear Sirs

USE OF SYSTEM OFFER [SITE OF CONNECTION] [REFERENCE]

Set out below is our offer for use of the **GB Transmission System** at [site/substation]. Please note that certain expressions which are used in this **Offer** are defined in the Interpretation and Definitions (contained in Section 11 of the **CUSC**) and when this occurs the expressions have capital letters at the beginning of each word and are in bold.

- 1 **The Company** offers to enter into a **Bilateral Embedded Generation Agreement** [and **Construction Agreement**] reference number [] in the form and terms attached as Section A.
- 2 It is a condition of this offer that:
 - (i) if not already a CUSC Party you enter into a CUSC Accession Agreement;
 - (ii) you satisfy The Company that you have entered into a Distribution Agreement with the owner/operator of the Distribution System for the connection of the User's Plant to and the use of such Distribution System;
 - [(iii) where required by **The Company** that you enter into a **Transmission Related Agreement** <u>(power station with Design</u> <u>Variation only)</u>]
- 3 The technical conditions with which you must comply as a term of this offer are set out in the **Grid Code**. Additional or different technical conditions are set out in the Appendices to the **Bilateral Embedded Generation Agreement**. It is your responsibility to ensure that your equipment complies with the requirements of the relevant conditions.
- 4 The Offer is made on the basis of an LCN of [] [and a TEC of []]. [The LCN and TEC [are to be made available on the same date] [TEC is to be made available at a later date than LCN].

- 5 This offer is open for acceptance according to the terms of Paragraph 3.7.4 of the **CUSC** and the **Transmission Licence**. Please note your right to make an application to the **Authority** to settle the terms of the offer pursuant to Standard Condition C9 of the **Transmission Licence**.
- 56 Please note the provisions of Paragraph 6.10.4 of the CUSC in respect of interactive offers which, inter alia, allows The Company to vary the terms of this Offer if a Connection or Modification Offer, which interacts with this Offer, is accepted first. In terms of Paragraph 6.10.4 of the CUSC, The Company will advise you of another offer being made by The Company, which may interact with your Offer.
- 67 To accept this offer, please sign and return the originals of the Bilateral Embedded Generation Agreement [and CUSC Accession Agreement] [and Construction Agreement] attached to this offer as Section A. The Company will then itself execute the Agreements and one original of each will be returned to you for your retention. The Agreements are only effective in accordance with their terms once they have been countersigned by The Company.
- **78** All communications in relation to this **Offer** should, in the first instance, be directed to [Description].].

Yours faithfully

.....

for and on behalf of National Grid Electricity Transmission plc

SECTION A FORM OF BILATERAL EMBEDDED GENERATION AGREEMENT AND CONSTRUCTION AGREEMENT AND CUSC ACCESSION AGREEMENT

END OF EXHIBIT E

CUSC – EXHIBIT XA

THE CONNECTION AND USE OF SYSTEM CODE – SHARED ACCESS CAPACITY RATE REQUEST FORM

DIRECTLY CONNECTED POWER STATION EMBEDDED POWER STATION INTERCONNECTOR OWNER DISTRIBUTION INTERCONNECTOR

Please study the following notes before completing and signing the Shared Access Capacity Rate Request Form.

1. National Grid Electricity Transmission plc ("The Company") requires the information requested in this form for the purposes of considering and assessing your Shared Access Capacity Rate Request. It is essential that both Sharing Users supply all information requested and provide all the confirmations required and that every effort should be made to ensure that such information and confirmations are accurate.

Please note the same terms used in this form are defined in the Interpretation in Definitions (contained in Section 11 to the **CUSC**) and when this occurs the expressions have capital letters at the beginning of each word and are in bold.

- 2. Where **The Company** considers that any information provided by the **Sharing Users** is incomplete or unclear then **The Company** will reject the **Shared Access Capacity Rate Request**.
- 3. Neither **Sharing User** may make any change to the information provided.
- 4. The Company shall charge the Sharing Users, and the Sharing Users shall pay to The Company the non-refundable Shared Access Capacity Rate Request Fee. The fee will be charged by The Company in accordance with the Charging Statements. No Shared Access Capacity Rate Request will be considered until such payment has been received.
- 5. **The Company** will consider the **Shared Access Capacity Rate Request** in accordance with the terms of Section 3 Appendix 3 Paragraph 11 of the **CUSC**.
- 6. Please complete this form and email it to [] and fax it to [].

The Company – Shared Access Capacity Rate Request

Please ensure that you have studied the notes before completing and signing this form.

A. Details of User (Donating Sharing User)

Name:

Address:

Fax No.:

Email Address:

Registered Number:

Name Title and Contact Details (including email address) for the person authorised to deal with this **Shared Access Capacity Rate Request** for and on behalf of the **User**.

.....

B. Bilateral Connection Agreement or Bilateral Embedded Generation Agreement details

Please detail the **Bilateral Agreement** date and reference number.

.....

C. Connection Site/Node

Please detail the **Connection Site/Node** or site of **Connection/Node** to which the **Shared Access Capacity Rate Request** relates.

.....

D. Sharing Period

Please provide the dates of the **Sharing Period** in weeks commencing on a Monday to which the **Sharing Request** relates.

Sharing Period	<u>From</u>	<u>To</u>
No. of Weeks	00.00 from	23.5
	[Must be a Monday]	Mus

<u>To</u> 23.59 Must be a Sunday

E. Maximum Levels (in whole MW) to be Shared

Please provide details of the maximum level (in whole MW).

Maximum [] MW (Positive only)

F. Details of User (Receiving Sharing User)

Name:

Address:

Fax No.:

Email Address:

Registered Number:

Name Title and Contact Details (including email address) for the person authorised to deal with this **Shared Access Capacity Rate Request** for and on behalf of the **User**.

.....

G. Bilateral Connection Agreement or Bilateral Embedded Generation Agreement details

Please detail the **Bilateral Agreement** date and reference number.

.....

H. Connection Site/Node

Please detail the **Connection Site/Node** or site of **Connection/Node** to which the **Shared Access Capacity Rate Request** relates.

.....

SHARED ACCESS CAPACITY RATE REQUESTFORM

- 1. We agree to pay the **Shared Access Capacity Rate Request Fee** on the terms specified in the **Notes** to this **Request Form**.
- 2. As the **Donating User** we confirm that the data submissions in respect of the **Connection Site/Node** or site of **Connection/Node** under the **Grid Code** are complete, accurate and up to date.
- 3. As the **Receiving User** we confirm that the data submissions in respect of the **Connection Site/Node** or site of **Connection/Node** under the **Grid Code** are complete, accurate and up to date.

Signed for and on behalf of the:

.....

Donating User

.....

Recieving User

ANNEX 2 – WORKING GROUP TERMS OF REFERENCE AND MEMBERSHIP

Working Group Terms of Reference and Membership

TERMS OF REFERENCE FOR CAP161-164 WORKING GROUP 'ACCESS WORKING GROUP 1'

RESPONSIBILITIES

- 1. The Working Group is responsible for assisting the CUSC Amendments Panel in the evaluation of CUSC Amendment Proposals CAP161, 162, 163 and 164 tabled by National Grid at the Amendments Panel meeting on 25th April 2008.
- 2. The proposals must be evaluated to consider whether each of them better facilitates achievement of the applicable CUSC objectives. These can be summarised as follows:
 - (a) the efficient discharge by the Licensee of the obligations imposed on it by the Act and the Transmission Licence; and
 - (b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.
- 3. It should be noted that additional provisions apply where it is proposed to modify the CUSC amendment provisions, and generally reference should be made to the Transmission Licence for the full definition of the term.

SCOPE OF WORK

- 4. The Working Group must consider the issues raised by the Amendment Proposals and consider if each of the proposals identified better facilitates achievement of the Applicable CUSC Objectives.
- 5. In addition to the overriding requirement of paragraph 4, the Working Group shall consider and report on the following specific issues:
 - Impact on bilateral agreements (BCA, BEGAs, CONSAG, Offers etc.)
 - Impact on core industry documents and other documents (incl. Transmission License)
 - Impact on computing systems, central and individual CUSC party
 - Application process and impact on bilateral agreements for short-term access
 - o Implementation and transition requirements, including timescales
 - The impact on System Operator costs, internal and external
 - A cost benefit analysis, including market impacts and the cost of carbon¹⁴

¹⁴ Taken account of Ofgem guidance with respect to: <u>http://www.ofgem.gov.uk/Licensing/IndCodes/Governance/Documents1/Code%20objectives</u>

- o Efficient investment signals [generation, transmission & interconnectors]
- $\,\circ\,$ Definitions, including the interaction with other codes and methodologies
- Offshore arrangements
- Applicability to embedded generation
- Credit and security requirement implications
- o Impact on the demand (exit) arrangements
- Overall revenue recovery (TNUoS, BSUoS and other charges)
- o Impact assessment on all users and licensees
- The CUSC linkages to the charging methodologies
- o Impact of short term access on existing CUSC Parties long term rights
- Impact on Security of Supply
- o Impact on Maintenance of the Reliability, Safety & Operation of the Grid
- o Limiting participation to physical players
- 5a. For CAP161, System Operator Release of Short-term Entry Rights, the working group shall also consider and report on the following specific issues:
 - o Impact on existing short term products, LDTEC and STTEC
 - o The auction process
 - Temporal definition of the product(s)
 - Transparency of information required before and after auction
 - The process for recording contractual holding or access rights
 - The payment process [assuming pay as bid is not a charging issue]
 - Requirement for and implications of any restrictions to the product e.g. a buyback price cap
 - Ensuring that the arrangements do not unduly discriminate against any particular plant type or range of plant types
 - Consistency with European regulations
 - The need for a short term baseline for zonal release
 - Economic release criterion
 - Who should run the auction
- 5b. For CAP162, Entry Overrun, the working group shall also consider and report on the following specific issues:
 - o Local allocation and physical asset capability limits
 - Interaction with the provision of Balancing Services (including services such as frequency response, MaxGen Service and black start)
 - Settlement process, including resolution of settlement (e.g. half hour)
 - o Lessons learnt from (and interaction with) cashout in the BSC
 - Ensuring that the arrangements do not unduly discriminate against any particular plant type or range of plant types
 - o Additional information transparency
- 5c For CAP163, Entry Capacity Sharing, the working group shall also consider and report on the following specific issues:
 - The notification process
 - \circ The transition arrangements for moving towards a sharing product
- 5d For CAP164, Connect and Manage, the working group shall also consider and report on the following specific issues:
 - The lead time for connection
- <u>%20letter%20-%20final%20for%20external%20publication.pdf</u> (note link to CUSC WG established on carbon analysis)

- Consider the transparency of bilateral changes to the connection date, including consideration of pre-defined circumstances by which this would be possible
- \circ The appropriateness of the symmetry in rights and obligations
- $\,\circ\,$ The transition arrangements for existing contracts
- $\circ~$ Interaction with other short term products
- 5e This working group shall have a sub group, to be known as "Access Working Group 3". The Terms of Reference for Access Working Group 3 shall be agreed by the Amendments Panel and shall include the consideration of a number of enabling changes, principally:
 - o Zonal access rights
 - Local only applications
 - Zoning criteria
 - Local asset charging
 - Residual charging
 - o Credit requirements for TNUoS charges based on a kWh element.
- 6. The Working Group is responsible for the formulation and evaluation of any Working Group Alternative Amendments (WGAAs) arising from Group discussions which would, as compared with the Amendment Proposals, better facilitate achieving the applicable CUSC objectives in relation to the issue or defect identified.
- 7. The Working Group should become conversant with the definition of Working Group Alternative Amendments which appears in Section 11 (Interpretation and Definitions) of the CUSC. The definition entitles the Group and/or an individual Member of the Working Group to put forward a Working Group Alternative Amendment if the Member(s) genuinely believes the Alternative would better facilitate the achievement of the Applicable CUSC Objectives. The extent of the support for the Amendment Proposals or any Working Group Alternative Amendments arising from the Working Group's discussions should be clearly described in the final Working Group Report to the CUSC Amendments Panel.
- 8. There is an obligation on the Working Group Members to propose the minimum number of Working Group Alternatives where possible.
- 9. All proposed Working Group Alternatives should include the proposer(s) details within the Final Working Group Report, for the avoidance of doubt this includes Alternative(s) which are proposed by the entire Working Group or subset of members.
- 10. There is an obligation on the Working group to undertake a period of Consultation in accordance with CUSC 8.17. The Working Group Consultation period shall be for a period of 4 weeks as determined by the Amendment Panel.
- 11. Following the Consultation period the Working Group is required to consider all responses including any WG Consultation requests. As appropriate the Working Group will be required to undertake any further analysis and update the Original and/or Working Group Alternatives. All responses including any WG Consultation Requests shall be included within the final report including a summary of the working Groups deliberations and conclusions

12. The Working Group is to submit their final report to the CUSC Panel Secretary on **17th July 2008** for circulation to Panel Members. The conclusions will be presented to the CUSC Panel meeting on **25 July 2008**.

MEMBERSHIP

13. It is recommended that the Working Group has the following members:

Chair National Grid Industry Representatives	Hêdd Roberts (National Grid) Patrick Hynes (Proposer) James Anderson Bob Brown Graeme Cooper Tony Dicicco Richard Ford Garth Graham Paul Jones Simon Lord Paul Mott Rekha Patel Rob Rome Tim Russell Helen Snodin Merel van der Neut Kolfschoten Barbara Vest
Authority Representative Technical Secretary	David Hunt Kathryn Sorrell Jeremy Caplin (Technical Advisor) STC (Technical Advisor)

NB: Working Group must comprise at least 5 Members (who may be Panel

Members)

- 14. The Chair of the Working Group and the Chair of the CUSC Panel must agree a number that will be quorum for each Working Group meeting. The agreed figure for CAP161, 162, 163 and 164 is that at least 5 Working Group members must participate in a meeting for quorum to be met.
- 15. A vote is to take place by all eligible Working Group members (for the avoidance of doubt, that is (i) the Proposer (National Grid) and (ii) the Industry representatives listed above) on the proposal and each Working Group Alternative, as appropriate, as to whether it better facilitates the CUSC Applicable Objectives and indicate which option is considered the BEST with regard to the CUSC Applicable Objectives. Working Group Members will be given not less than five business days notice of the meeting at which the vote will take place. The results from the vote shall be recorded in the Working Group Report.
- 16. Working Group Members or their appointed alternate is required to attend a minimum of 50% of the Working Group Meetings to be eligible to participate in the Working Group vote.
- 17. The Technical Secretary to keep an Attendance Record, for the Working Group meetings and to circulate the Attendance Record with the Action Notes after each meeting. This will be attached to the Final Working Report.

- 18. The membership can be amended from time to time by the CUSC Amendments Panel.
- 19. If any Working Group Member wishes to nominate an Alternate (to act on their behalf in their absence from meetings) then this should be sent to the Working Group Chair once the Working Group is under way who will confirm (to the Working Group Member) that the Alternate is duly designated. For the avoidance of doubt if the Working Group Chair believes the suggested Alternate does not have sufficient expertise in the issues being considered by the Working Group they will ask the Working Group Member to suggest a more suitable Alternate.
- 20. Observers may be permitted by the Chair to attend any meeting. It should be noted that the observer (i) will not have a vote and (ii) cannot speak unless asked to do so by the Chair. Any CUSC Party wishing to be an observer should agree with the Working Group Chair advance .The Chair may invite +additional industry experts to any meeting as required to ensure efficient and comprehensive coverage of the agenda.

RELATIONSHIP WITH AMENDMENTS PANEL

- 21. The Working Group shall seek the views of the Amendments Panel before taking on any significant amount of work. In this event the Working Group Chair should contact the CUSC Panel Secretary.
- 22. The Working Group shall seek the Amendments Panel advice if a significant issue is raised during the Consultation process which would require a second period of Consultation in accordance with 8.17.17.
- 23. Where the Working Group requires instruction, clarification or guidance from the Amendments Panel, particularly in relation to their Scope of Work, the Working Group Chair should contact the CUSC Panel Secretary.
- 24. The working group shall maintain a register of assumptions and issues, which shall be published and reported to the Amendments Panel and other Transmission Access working groups on a regular basis.

MEETINGS

- 25. The Working Group shall, unless determined otherwise by the Amendments Panel, develop and adopt its own internal working procedures and provide a copy to the Panel Secretary for each of its Amendment Proposals.
- 26. To ensure an efficient process (and mindful of room logistics) only the Working Group Member <u>or</u> their appointed Alternate can attend a meeting. If an alternate wishes to attend the same meeting as their associated member this will be as an observer (under item 18. above) unless they have previously agreed with the Working Group Chair.

REPORTING

- 27. The Working Group Chair shall prepare final reports to the **25th July** Amendments Panel responding to the matter set out in the Terms of Reference.
- 28. A draft Working Group report will be produced individually for each of CAP161, 162, 163 and 164. Each draft working group report will include the relevant information from Access Working Group 3.
- 29. A draft Working Group Report must be circulated to Working Group members with not less than five business days given for comments.
- 30. Any unresolved comments within the Working Group must be reflected in the final Working Group Report.
- 31. The Working Group Chair (or another Working Group member nominated by him) will present the Working Group report to the Amendments Panel as required.

Sub-Group Terms of Reference and Membership

TERMS OF REFERENCE FOR SUB GROUP FOR CAP161-166 WORKING GROUPS, 'ACCESS WORKING GROUP 3'

RESPONSIBILITIES

- 1. The Sub-Group is responsible for assisting the two Working Groups established by the CUSC Amendments Panel for CAP161-66, which were tabled by National Grid at the Amendments Panel meeting on 25th April 2008.
- 2. The Sub-Group is established to evaluate the enabling elements of CAP161-166 and must be evaluated to consider whether the enabling elements better facilitate achievement of the applicable CUSC objectives. These can be summarised as follows:
 - (c) the efficient discharge by the Licensee of the obligations imposed on it by the Act and the Transmission Licence; and
 - (d) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.
- 3. It should be noted that additional provisions apply where it is proposed to modify the CUSC amendment provisions, and generally reference should be made to the Transmission Licence for the full definition of the term.

SCOPE OF WORK

- 4. The Sub-Group must consider the enabling elements and issues raised by the Amendment Proposals and consider if the proposals identified better facilitate achievement of the Applicable CUSC Objectives.
- 5. In addition to the overriding requirement of paragraph 4, the Sub-Group shall consider and report to the Working Groups on the appropriateness, or otherwise of the following specific issues:
 - Application process for acquiring long and short-term access products.
 - Implications for moving from nodal access rights to zonal access rights.
 - Consideration of levels of security and credit requirements for commoditised residual generation tariff.
 - Impact on core industry documents.
 - Impact on IT systems.
 - Necessity for an impact assessment from a User perspective.
 - Impact on the transparency in the calculation of TNUoS tariffs and the User's ability to replicate these using the DCLF ICRP model.
 - Consideration of issues associated with SQSS.
 - Linkage with embedded generation.
 - Linkage with offshore transmission.

- 6. As a Sub-Group of the Working Groups for CAP161-166, the Group will where appropriate, provide input into the formulation and evaluation of any Working Group Alternative Amendments (WGAAs).
- 7. There is an obligation on the Working Group to undertake a period of Consultation in accordance with CUSC 8.17. The Working Group Consultation period shall be for a period of 4 weeks as determined by the Amendment Panel.
- 8. Following the Consultation period the Working Group is required to consider all responses including any WG Consultation requests. As appropriate the Working Group will be required to undertake any further analysis and update the Original and/or Working Group Alternatives. All responses including any WG Consultation Requests shall be included within the final report including a summary of the working Groups deliberations and conclusions.
- 9. The Sub-Group is to submit their final report to the Working Groups and the CUSC Panel Secretary on 17th July 2008 for circulation to Panel Members. The conclusions will be presented to the CUSC Panel meeting on 25 July 2008.

MEMBERSHIP

10. It is recommended that the Sub-Group has the following members:

Chair National Grid Representative Industry Representatives	Hêdd Roberts (National Grid) Craig Maloney Graeme Cooper Paul Jones Allan Kelly David Lewis Robert Longden Simon Lord Frank Prashad Louise Schmitz Nigel Scott / Helen Snodin Dennis Timmins Dave Wilkerson Barbara Vest
Technical Expert Authority Representative Technical Secretary	Beehun Tan/ Qiong Zhou (Jo) Anthony Mungall Tom Ireland (National Grid)

NB: The Sub-Group must comprise at least 5 Industry Representatives (who

may be Panel Members)

- 11. The Chair of the Sub-Group and the Chair of the CUSC Panel must agree a number that will be quorum for each Sub-Group meeting. The agreed figure is that at least 5 Sub-Group members must participate in a meeting for quorum to be met.
- 12. The Technical Secretary to keep an Attendance Record, for the Sub-Group meetings and to circulate the Attendance Record with the Action Notes after

each meeting. This will be attached to the Final Sub-Group Report. The Chair will circulate the Working Group Report after each meeting.

13. The membership can be amended from time to time by the CUSC Amendments Panel.

RELATIONSHIP WITH AMENDMENTS PANEL

- 14. The Sub-Group shall seek the views of the Amendments Panel and Working Groups 1 and 2 before making a significant change to the scope of work. In this event the Sub-Group Chairman should contact the CUSC Panel Secretary.
- 15. The Working Group shall seek the Amendments Panel advice if a significant issue is raised during the Consultation process which would require a second period of consultation in accordance with 8.17.17.
- 16. Where the Sub-Group requires instruction, clarification or guidance from the Amendments Panel and Working Groups 1 and 2, particularly in relation to their Scope of Work, the Sub-Group Chairman should contact the CUSC Panel Secretary.

MEETINGS

17. The Sub-Group shall, unless determined otherwise by the Amendments Panel, develop and adopt its own internal working procedures and provide a copy to the Panel Secretary for each of its enabling elements of the Amendment Proposals.

REPORTING

- 18. The Sub-Group Chairman shall prepare a final report to the 25th July 2008 Amendments Panel responding to the matter set out in the Terms of Reference.
- 19. A draft Sub-Group Report must be circulated to Sub-Group members with not less than five business days given for comments.
- 20. Any unresolved comments within the Sub-Group must be reflected in the final Sub-Group Report.
- 21. The Chairman (or another member nominated by him) will present the Sub-Group report to the Amendments Panel as required.
- 22. An updated risk register will be published and discussed as a standing agenda item at each TCMF.

ANNEX 3 – WORKING GROUP ATTENDANCE REGISTER

Working Group 1 attendance (the numbers relate to the associated alternate)

Working Group 1	13	28	10	23	8	18	6	20	3	10	19	23	5	12	18
members		ay		un 1		ul		ug	0	Sep		Oct	0	Nov	
James Anderson	√	uy √			6	ui	\checkmark	ug √	\checkmark		, 	√ √	✓	√	\checkmark
Bob Brown	√ 	\checkmark	\checkmark	· ✓	√	✓	· ✓	\checkmark	-	\checkmark	√ 	-	· ✓	\checkmark	\checkmark
Graeme Cooper		\checkmark	-	\checkmark	✓	 ✓ 	-			-	\checkmark		· ✓	\checkmark	\checkmark
Tony Dicicco	\checkmark	1	\checkmark	\checkmark	· ✓	√ 	✓	✓	✓	\checkmark	\checkmark	\checkmark	√ 	\checkmark	\checkmark
Richard Ford	· •	· ✓	· •	\checkmark	· ✓	•	· √	•	· •	· •	-	-	· ✓	-	\checkmark
Garth Graham	· •	· •	· ✓	· ✓	· √	~	•	\checkmark	•	· ✓	✓	 ✓ 	· √	✓	·
Paul Jones	· •	· •	· •	\checkmark	· •	· ✓	· ✓	, ,	-	\checkmark	-	· ✓	· •	· •	\checkmark
Simon Lord	· •	2	· •	· ✓	· √	$\overline{\checkmark}$	• •	2	2	2	\checkmark	•	2	· •	· ✓
Paul Mott	• •	2	• •	· ✓	• •	· ·	• •	8	∠ √	8	• •		∠ √	• •	•
Rekha Patel	• •	✓	• •	•	• •	$\overline{\checkmark}$	• •	√	• •	0 ✓	• •	✓	• •	• •	\checkmark
Rob Rome	• √	• ✓	• ✓	\checkmark	• √	• •	• •	• •	•	• ✓	9	•	9	• ✓	• •
Tim Russell	▼ √	▼ ✓	▼ ✓	▼ ✓	• 7	• ✓	•	▼ ✓	✓	▼ ✓	9 √	✓	9 √	▼ ✓	▼ ✓
Helen Snodin	▼ √	•	▼ ✓	▼ ✓	/ ✓	• ✓	\checkmark	▼ ✓	▼ √	▼ ✓	▼ ✓	•	▼ ✓	▼ ✓	▼ ✓
	v √	3	▼ ✓	▼ ✓	▼ ✓	▼ ✓	▼ √	▼ ✓	▼ √	▼ ✓	▼ √	\checkmark	▼ √	v √	▼ ✓
Merel van der Neut Kolfschoten	-	-		v		v	v	v	v	v	-	-	v	v	v
Barbara Vest	\checkmark	\checkmark	5	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	5	\checkmark			
Patrick Hynes	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Hêdd Roberts	✓	✓	✓	~	✓	\checkmark	✓	✓	✓	✓	✓	✓	✓	✓	~
(Chair)															
Kathryn Sorrell	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
(Tec Sec)															
Alternates and	13	28	10	23	8	18	6	20	3	10	19	23	5	12	18
observers		ay		un		ul		ug	Ŭ	Sep		Oct	Ŭ	Nov	
Jeremy Caplin	✓	 ✓	√	√	-		√	√	✓	<u>√</u>	✓				
(NG)															
David Hunt		✓	✓	✓	✓	✓	✓	✓			\checkmark	✓		✓	✓
David Hunt (Ofgem)		~	~	~	~	✓	~	✓			~	~		~	✓
David Hunt (Ofgem) Deborah	✓	✓ ✓	✓ 	✓ ✓	✓ ✓	✓	~	✓ ✓	✓		✓ ✓	✓ ✓	✓	✓ ✓	✓
(Ofgem)	✓		~			✓	✓ 	-	✓			-	 ✓ 		 ✓
(Ofgem) Deborah	✓		✓ 			✓	 ✓ 	-	~			-	~		✓
(Ofgem) Deborah MacPherson (STC)	✓ ✓		✓ 			✓ 	 ✓ 	-	✓ ✓	✓		-	✓ ✓		✓
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem)	•		✓ 			✓	Image: A start of the start	-	-	 ✓ 		-	✓ 		✓
(Ofgem) Deborah MacPherson (STC)	✓		✓ 			✓ 	✓ 	-	-	✓ 2		-	✓ 2		✓
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG) Andy Rimmer	✓	✓	✓ 			✓	✓ 	✓	 ✓ 			-			✓
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG)	✓	✓ 2				✓ 	✓ 	✓	 ✓ 			-			✓
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG) Andy Rimmer Fiona Navesey Dennis Timmins	✓	✓ 2 4				✓		✓	 ✓ 			-			
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG) Andy Rimmer Fiona Navesey Dennis Timmins Nigel Scott	✓	✓ 2 4 1	5			✓ 	✓ 	✓	 ✓ 			-			
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG) Andy Rimmer Fiona Navesey Dennis Timmins Nigel Scott Ian Moss	✓	✓ 2 4 1		✓ ✓	✓ 			✓	✓ 2		✓ 	-			
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG) Andy Rimmer Fiona Navesey Dennis Timmins Nigel Scott	✓	✓ 2 4 1		✓ ✓	✓ 			2	✓ 2	2	✓ 	-			
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG) Brian Taylor (NG) Andy Rimmer Fiona Navesey Dennis Timmins Nigel Scott Ian Moss Emma Luckhurst Stuart Cook	✓	✓ 2 4 1		✓ ✓	✓			2	✓ 2	2	✓ 	-			
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG) Andy Rimmer Fiona Navesey Dennis Timmins Nigel Scott Ian Moss Emma Luckhurst Stuart (Ofgem)	✓	✓ 2 4 1		✓ ✓	✓			2	✓ 2	2	✓ 	-			
(Ofgem) Deborah MacPherson (STC) Min Zhu (Ofgem) Brian Taylor (NG) Brian Taylor (NG) Andy Rimmer Fiona Navesey Dennis Timmins Nigel Scott Ian Moss Emma Luckhurst Stuart Cook	✓	✓ 2 4 1		✓ ✓	✓ ✓ ✓			2	✓ 2	2	✓ 	-			
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Teleconference is marked as attending

Working Group 3

	12-	27-	04-	16-	29-	13-	29-	13-	22-	02-	12-	25-	10-
Date	May	May	Jun	Jun	Jun	Jul	Jul	Aug	Aug	Sep	Sep	Sep	Nov
Meeting No.	1	2	3	4	5	6	7	8	9	10	11	12	13
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Allan Kelly	1	1	1	1	1	1		1	1				
Anthony Mungall	1	1		1		1		1		-	1		1
Barbara Vest	1				1	1	1	1		-	1	1	
Craig Maloney	1	1	1	1	1	1	1	1	1		1	1	1
Dave Wilkerson	1	1	1	1	1	1	1			-	1	1	1
Dennis Timmins	1		1	1	1	1	1		1	-	1	1	1
Frank Prashad	1		1	1	1	1	1	1	1	_	1	1	
Hêdd Roberts	1	1	1	1	1	1	1	1	1		1	1	1
Louise Schmitz	1	1	1	1	1	1	1	1	1		1	1	1
Helen Snodin (N Scott)	1	1	1	1	1	1	1	1	1		1	1	1
Paul Jones	1	1	1	1	1		1	1	1		1		1
Robert Longden	1	1		1		1	1	1	1		1		1
Simon Lord	1			1	1	1	1				1	1	1
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Garth Graham					1					1			
Owen Wilkes					1					1			
David Walker						1				1			
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James Anderson							1			1		1	
Stuart Cook						1				1	1		
David Scott						-				1	-		1

ANNEX 4 – AMENDMENT PROPOSAL FORM

CUSC Amendment Proposal Form

CAP: 162

Title of Amendment Proposal: Transmission Access - Entry Overrun

Description of the Proposed Amendment (mandatory by proposer):

Creation of a commercial mechanism for dealing with export above existing entry access capacity holdings.

This proposal would permit Generators to export in excess of their total entry access capacity holding (currently sum of TEC, LDTEC, STTEC). Export would be capped by "local" rather than "wider" system capability limits (e.g. CEC and any local transmission limits as detailed in the bilateral agreement), subject to continued Grid Code compliance. The additional volume of entry access used above existing entry access capacity holding would be 'Entry Overrun'.

For the purposes of this amendment, it is suggested that the charging arrangements (codified in the charging methodologies) for Entry Overrun would establish charges related to the cost imposed of accommodating Entry Overrun.

Appropriate credit will be required. The level required would be established in the assessment stage in accordance with the Best Practice Guidelines for Gas and Electricity Network Operator Credit Cover.

This amendment includes a revised process for 'local only' applications (connection without long-term entry rights for the wider system) and a change in the nature of long-term and short-term entry rights from nodal to zonal. The zones used would be consistent across all long-term and short-term products. The proposer suggests that in order to ensure equitable treatment of non locational asset costs that the residual charge should be commoditised.

For illustrative purposes, a more detailed Entry Overrun straw man is attached.

Description of Issue or Defect that Proposed Amendment seeks to Address (mandatory by proposer):

The lack of flexibility of short-term products and the application process for current entry access products can restrict the efficient use of spare capacity and efficient redistribution of previously allocated capacity.

In addition, under the current arrangements, users who release long-term entry access rights are committing not to export. This can lead to potential overbooking of long-term rights, delayed connection and a reliance on administered rules for determining the appropriate level of sharing of transmission capacity between users.

Furthermore, breach of CUSC for exceeding entry access capability is inappropriate in an environment where generators are operating in a more flexible manner; and encourages users to overbook capacity or restrict efficient operation.

Impact on the CUSC (this should be given where possible):

The main impact on the CUSC will be on sections 2 and 3 in relation to the obligations on Users and National Grid with respect to the rights and obligations associated with export on to the transmission system.

There may be also be impacts on the credit requirements in sections 2 and 3 to cover any additional liabilities associated with overrun charging.

Impact on Core Industry Documentation (this should be given where possible):

To be identified during assessment.

The Planning Code and Data Registration Code of the Grid Code to reflect the ability of a party to export in excess of their total entry access holding, and ensure that Connections conditions are maintained throughout the full range of operations.

Impact on Computer Systems and Processes used by CUSC Parties (this should be given where possible):

It is envisaged that data would be required from the Balancing Mechanism / Settlement systems to feed into a new the Entry Overrun tariff settling and billing systems. Note that this impact is associated with the consequential charging change rather than Entry Overrun per se.

Details of any Related Modifications to Other Industry Codes (where known):

The charging methodologies, to develop charging arrangements for Entry Overrun consistent with the relevant objectives contained in the transmission licence.

The Security and Quality Supply Standards, to consider the implications for design of the transmission system of a short term product.

Entry Overrun will interact with System Operator revenues. The System Operator incentive arrangements will need to provide the appropriate incentives on the System Operator to seek to accommodate overrun in an efficient and economic manner.

Justification for Proposed Amendment with Reference to Applicable CUSC Objectives** (*mandatory by proposer*):

The proposed amendment would better facilitate the achievement of Applicable CUSC Objectives (a) the efficient discharge by the licensee of the obligations imposed upon it under the Acts and by the licence; and (b) facilitating effective competition in generation, by:

- Promoting the more efficient use of the transmission system through allowing parties to connect in advance of wider transmission works.
- Improving the signals for design of the transmission system through creating an alternative to firm long-term access products priced to reflect asset costs. This would particularly be the case against the forecast increase in plant margins and forecast increase in the use of generation from intermittent sources This may suit a range of plant types.
- Providing for the release of long-term entry access rights from existing plant thus facilitating early entry in to the market for new plant.

Details of Proposer: Organisation's Name:	National Grid
Capacity in which the Amendment is being proposed: (i.e. CUSC Party, BSC Party or "energywatch")	CUSC Party
DetailsofProposer'sRepresentative:Proposer'sName:Organisation:Organisation:Felephone Number:Email Address:	Patrick Hynes National Grid 01926656319 Patrick.hynes@uk.ngrid.com
DetailsofRepresentative'sAlternate:Name:Organisation:Telephone Number:Email Address:Attachments (Yes/No): YesIf Yes, Title and No. of pages of eacEntry Overrun Straw man, 3 pages	Duncan Burt National Grid 01926656703 duncan.burt@uk.ngrid.com h Attachment:

Notes:

- 1. Those wishing to propose an Amendment to the CUSC should do so by filling in this "Amendment Proposal Form" that is based on the provisions contained in Section 8.15 of the CUSC. The form seeks to ascertain details about the Amendment Proposal so that the Amendments Panel can determine more clearly whether the proposal should be considered by a Working Group or go straight to wider National Grid Consultation.
- 2. The Panel Secretary will check that the form has been completed, in accordance with the requirements of the CUSC, prior to submitting it to the Panel. If the Panel Secretary accepts the Amendment Proposal form as complete, then he will write back to the Proposer informing him of the reference number for the Amendment Proposal and the date on which the Proposal will be considered by the Panel. If, in the opinion of the Panel Secretary, the form fails to provide the information required in the CUSC, then he may reject the Proposal. The Panel Secretary will inform the Proposer of the rejection and report the matter to the Panel at their next meeting. The Panel can reverse the Panel Secretary's decision and if this happens the Panel Secretary will inform the Proposer.

The completed form should be returned to:

Beverley Viney Panel Secretary Commercial Frameworks National Grid National Grid House Warwick Technology Park Gallows Hill Warwick CV34 6DA

Or via e-mail to: Beverley.Viney@uk.ngrid.com

- (Participants submitting this form by email will need to send a statement to the effect that the proposer acknowledges that on acceptance of the proposal for consideration by the Amendments Panel, a proposer which is not a CUSC Party shall grant a licence in accordance with Paragraph 8.15.7 of the CUSC. A Proposer that is a CUSC Party shall be deemed to have granted this Licence).
 - 3. Applicable CUSC Objectives** These are defined within the National Grid Electricity Transmission plc Licence under Section C7F, paragraph 15. Reference should be made to this section when considering a proposed amendment.

Entry Overrun Straw Man

Introduction

This straw man covers the main process for Entry Overrun, one of a number of proposed incremental changes to electricity access arrangements.

Based on key building blocks in the TAR report, Entry Overrun is described as:

Nature of rights: a power station may export up to its local access capability (see below). The right is enduring. The user has no effective¹⁵ right to compensation if overrun cannot be accommodated by the System Operator.

Allocation: all users have the right to overrun up to any local asset capability.

Pricing: the right will be priced ex post based on the costs incurred in facilitating the overrun. A user may set a ceiling bid through the BM, however the System Operator is not necessarily obliged to accept the bid.

Secondary trading: the right cannot be traded.

Model description

Any Generator will be permitted to export power on to the transmission system at any Power Station up to the allocated physical capability of the local assets (Power Stations CEC and local asset capability¹⁶). Power Stations must have a completed compliant local connection prior to being able to overrun.

The proposal allows an extremely small granularity of product, down to half hour, set by the user on the day. Settlement will be on an aggregated output over a half hourly, although local asset capability must not be exceeded on a minute by minute basis. As described Entry Overrun seeks minimises the transaction costs associated with gaining short-term access.

It is envisaged that the settlement and charging process will be based on zones, and be by company (registered CUSC party). Any output above contacted access level will be charged at the cost of facilitating that Entry Overrun by National Grid. Timescales for settlement will be broadly similar to BSUoS timescales (1/2 hour periods with a 28 day rolling settlement).

Entry Overrun charges will be the zonal Entry Overrun price multiplied by the Entry Overrun volume. Simply, the Entry Overrun volume is the metered volume, corrected for BOAs (should take back to PNs), minus the firm access right holding (either long-term or short-term). The exact definition of Entry Overrun volume will be established in the assessment stage. The methodology for establishing zonal Entry Overrun prices will be part of the charging methodologies. During the assessment stage National Grid intend to put forward a number of possible methodologies that vary the balance of cost reflectivity, simplicity, transparency, implementation cost and timescales. Initially, National Grid's central model is a derivation of the current internal costing tool as discussed at the TASG in 2007¹⁷. Subject to more detailed costing of the IS tools, implementation would be April 2010. To facilitate earlier implementation a two stage approach, with very limited IS development and 'basic' pricing, could be considered.

¹⁵ Whilst the users that overrun can submit bids in to the balancing mechanism (BM), these bids may also set the overrun charge. Therefore the charge effectively removes the compensation paid through the BM. In these circumstances, the charge and the bid may be exactly the same, subject to the development of the overrun pricing methodology.

¹⁶ A new term, local asset capability to reflect the intra zonal capacity beyond the local substation (e.g. local radial connecting routes). This limit is expressed in MW or MVA and can not be exceeded by the user with out permission or instruction from National Grid.

¹⁷ <u>http://www.nationalgrid.com/NR/rdonlyres/7DFB1235-5741-4744-9C9F-54B8CBC2F1A1/19202/PresentationNationalGridIntrotoconstraintcostingan.pdf</u>

In National Grid's central pricing model the zonal overrun price is the volume weighted average price of all actions taken to accommodate Entry Overrun in a particular zone (the actions may be outside that zone), along with the system cost of replacement actions and headroom¹⁸ issues. Marginal pricing should also be considered during development of the charging options.

In order to allow a generator to limit financial exposure to the ex-post nature of Entry Overrun prices and to allow the System Operator to maintain physical security of the system, parties who overrun will still 'participate' in the Balancing Mechanism. An individual Generator's overrun volume will be 'corrected' by its bid volumes to ensure charges for overrun recover revenues paid through the BM, i.e. removing compensation paid to users who have no rights. A Generator intends to overrun yet subsequently has a bid accepted will be exposed to the net difference of bid income minus the Entry Overrun price. The Entry Overrun price includes replacement cost and may be an average and therefore there will be some residual exposure to the difference between bid price and overrun charge.

Assumptions

- 1. The price calculation methodology will be in the charging statements and be assessed on the existing charging relevant objectives.
- 2. Generators comply with the Grid Code. In particular, submission of accurate PNs on a unit basis in the prescribed timescales.
- 3. The TNUoS residual charge is commoditised, i.e. charged half hourly on a MWh basis. This provides fair allocation of non locational costs between system users holding both long term and short term access.
- 4. Acceptance of an offer in the BM does **not** confer any firm access right. Generators may still be exposed to overrun if the full output is not covered by existing entry access holding and therefore would submit BM prices accordingly (i.e. including the risk of an Entry Overrun charge).
- 5. Credit will be in place for Entry Overrun. This may require a short term process of managing credit liability.
- 6. There will be a licence methodology for establishing and managing zones.
- 7. The zones will be the same as those used for access products and consistent with the charging methodologies.
- 8. There is no benefit paid for Entry Overrun in an importing zone in the average price /cost recovery model.
- 9. All new capacities will be published in the SYS i.e. a generators local assets capability.

Initial ex-post pricing model

The model below is a basic model that could be further developed during the assessment stage, including the drafting of the Entry Overrun charging methodology. Other models may also be considered that could better facilitate the applicable charging objectives.

The basic model is:

- Entry Overrun prices will be posted on working day +1 at 1600hrs (not posted weekends or Bank Holidays).
- The methodology is based on an average tariff and set for cost recovery, including the
 - the cost of constraining plant
 - o the cost of replacing plant

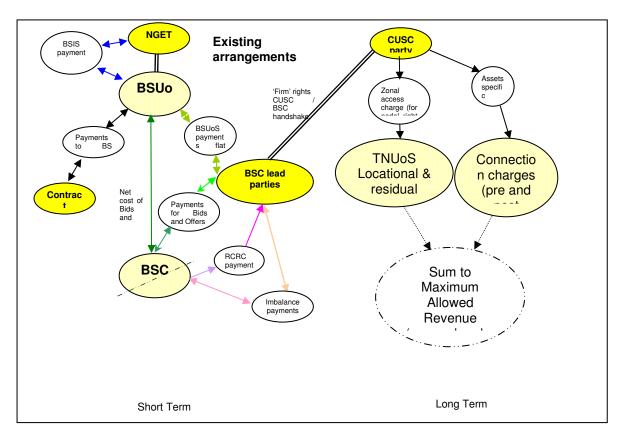
¹⁸ Headroom is unused generation, that could be used to provide reserve or response, which is sterilised by an active constraint.

- the cost of reduced headroom
- the appropriate allocation of any contract costs.
- Prices are calculated manually based on a published methodology. Compliance with the methodology may be subject to independent audit.
- The methodology will be part of the licence obligation under the charging methodology i.e. subject to the same objectives and wider transmission licence requirements, including:
 - Facilitating competition
 - Reflect costs incurred
 - Taking account of change to the transmission businesses
 - Not unduly discriminating between a class or classes of users
- The methodology will produce tariffs for each zone.
- Entry zones will be established through a new licence methodology.
- The overrun price will have a half hour resolution.
- The settlement process / timing would be agreed in the assessment phase, for discussion:
 - o Receive metered information from IO14 after five days
 - Calculate Entry Overrun charges and post indicative charges at D+7 (or alternative)
 - o 28 day settlement
- It is envisaged that Entry Overrun revenues will be included within BSUoS and may be positive or negative.

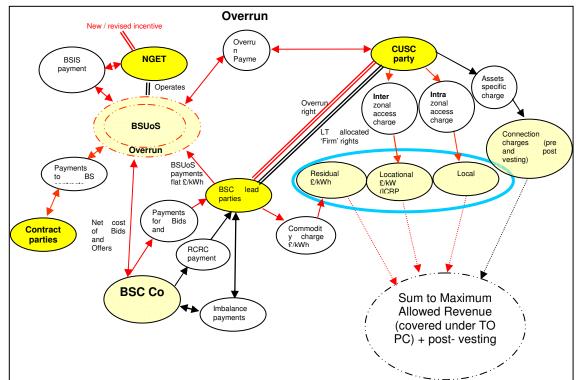
Other models could include:

- Option and issues of providing more prompt price reporting.
- Other pricing mechanisms, including:
 - A simple price e.g. multiple of TNUoS or BSUoS
 - Marginal pricing models

National Grid may carry out a charging pre-consultation on all charging methodologies developed by the working group. Given the time constraints any pre-consultation may be limited to two weeks during the working group process. Further full consultation on a preferred charging model and associated methodology will be complete alongside the formal CUSC consultation.



Annex 5 – Revenue flows



The above two diagrams show the flow of revenue currently ("Existing Arrangements") and as originally proposed ("Overrun") under CAP162. Note that there will be a separate consultation on residual charging and therefore the units of residual charging (i.e. \pounds/kW or \pounds/kWh) have yet to be consulted upon and decided.

Key:

rtey.	
	A revenue fund e.g. BSUoS
	A party e.g. CUSC party

Dashed lines round an oval imply it may contract or expand. A single line is a money flow. On the 'Existing arrangements' similar colours indicate relationship, on the revised arrangements red indicates a possible change. A double line is an obligation, right or relationship; red is new or changed. Dashed line / oval represents 'sum to'.

Existing arrangements

To trade parties must be a CUSC and BSC party (or allied to someone responsible for them in the BSC / CUSC). The CUSC parties have to pay charges associated with accessing the transmission system in accordance with the methodology; these are TNUoS and Connection, which make up MAR. BSC parties pay and get paid in accordance with the BSC.

The charging methodologies also require parties to pay BSUoS charges, these are based on metered output. BSUoS represent the net costs of GBSO actions, including net cost of bids and offers, contracts, trades etc. Any GBSO incentive payment / receipt also flows through BSUoS.

BSC parties pay / get paid for bids and offers, the net difference flows through to BSUoS, representing the cost of balancing and securing the electrical system. BSC parties also pay imbalance charges, with the net difference being redistributed through RCRC back to BSC parties. These two distinctly separate revenue flows are shown separate in the BSC by a dashed line.

Generic short term changes

The TNUoS methodology separates out 'Local' and 'Residual' elements of the transmission charge (associated with accessing the transmission system) to ensure that not only firm transmission access holders pay for the Residual and to ensure local charges are dealt with more effectively. This also recognises that as plant margins increase there will be a greater variance of load factors. As discussed at Working Group 3 all parties should contribute to the residual element of TNUoS. Parties who hold firm transmission access rights pay the Locational charge – based on their firm access capacity (MW) holding. All parties pay the local charge in accordance with the local changing arrangements. Connection charges are not expected to change.

A change to the basis of the Residual charge from kW to kWh could result in a switch to the CUSC party being charged, noting TNUoS and BSUoS may be paid by different parties. This potential change is shown but is subject to industry consultation following Working Group 3 discussions. Any change is only required where the charge is kWh based. A switch between CUSC parties may be the case for Interconnectors and CUSC 6.29 parties, although rules in the methodology could avoid any switch.

The MAR+ post vesting connection revenue will change if more parties connect, although this would happen eventually anyway. The difference between the total change in MAR+ and net revenue recovered through Local and Connection charges is reconciled through the Residual. If parties switch from Long-Term to Short-Term transmission access then the amount to be collected through the Locational element potentially reduces (assuming only exporting zones). However, a reduction in the

amount recovered through the Locational element will increase the amount to be recovered through the Residual element of the transmission charge.

Overrun

In the case of Overrun CUSC parties can exceed their firm transmission access holding. This will attract an Overrun charge, paid by the generator to the GBSO based on the Overrun charging methodology.

The consequence of a party overrunning is expected to be a change in the cost of running the transmission system, normally dealt with through BSUoS. In exporting areas this would be an increase, in negative zones this may be a decrease (in the cost over what the GBSO would have had to have taken without overrun). The general assumption is that parties in negative zones would opt for firm transmission access, in order to secure relatively firm income from the Locational element of the transmission charge.

The difference between the sum of Overrun receipts and the change in GBSO operating costs due to Overrun appears in BSUoS. This change may be positive or negative so may increase or decrease BSUoS payments paid by all CUSC parties. The choice of the methodology will influence how large this change will be, although in any of the proposals it could be positive or negative. All proposals other than the marginal proposal are intended to leave overall net BSUoS charges unchanged.

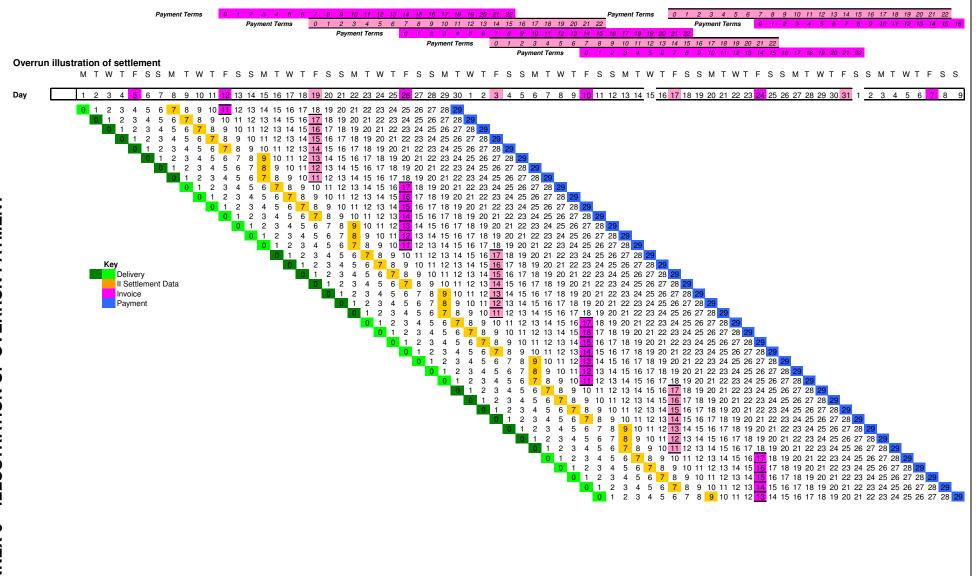
It should be noted that under this proposal where parties who overrun are exposed to the cost they cause so that other parties are held whole result in the overall split of BSUoS changing. The split of the revised BSUoS revenue (BSUoS revenue without overrun + additional payments due to overrun) will become more weighted toward generation by the percentage incurred in overrun. For example, if Overrun doubled the cost of BSUoS, the split of BSUoS would be change from 50:50 (G:D) currently to 25:75 (G:D).

Within the fixed ex-ante option there is the opportunity for a user to arbitrage, knowing the cost of Overrun before it Overruns and placing appropriate bid prices. Within the average pricing methodology all Users share the cost of Overrun, therefore potentially undermining the need to purchase longer term transmission access rights (an individual User only ever sees the average cost although efficient transmission investment is carried out against the total cost). Under the marginal methodology the tariff will be derived from the differential marginal bid and offer prices, so may under or over recover, depending on the exact disposition of overrunning generation. The delta revenue would be circulated back to all Users through BSUoS costs.

For example, if a large Generator in Scotland switched to overrun:

The TNUoS for all other generation in the north would reduce, reflecting the Long-Term commitment for transmission access, and freeing up access for new entrants. This assumes that potential Overrunning parties (those with a connection but no TEC) are not modelled in the TNUoS tariff model. However it may potentially be exposed to higher total overrun charges if it ran when the system was constrained.





ANNEX 6 – ILLUSTRATION OF OVERRUN PAYMENT