



## CONSULTATION DOCUMENT VOLUME 1

### CUSC Amendment Proposal CAP165

#### Transmission Access – Finite Long-term Entry Rights

*The purpose of this document is to consult on Amendment Proposal CAP165 with CUSC Parties and other interested Industry members*

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Responses to this consultation should be sent to [bali.virk@uk.ngrid.com](mailto:bali.virk@uk.ngrid.com) by close of business on 15<sup>th</sup> December 2008. Respondents are requested to include the term 'CAP165' in the email subject line.

## I DOCUMENT CONTROL

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## 1.0 SUMMARY AND RECOMMENDATIONS

### Executive Summary

- 1.1 CAP165, Transmission Access – Finite Long-term Entry Rights, was proposed by National Grid and submitted to the CUSC Amendments Panel for consideration at their meeting on 25 April 2008. CAP165 seeks to temporally define finite long-term entry rights to access the transmission system and the associated User commitment.
- 1.2 The CAP165 original proposal is based on long-term entry access rights being defined on a zonal basis, such that each User can share transmission capacity between its or other power stations on a real time basis at a 1:1 exchange rate within defined zones.
- 1.3 The CAP165 original proposal includes the following main features for access to the wider transmission system:
  - Long-term entry access is defined as a number of (whole financial) years, nominated by the generator;
  - The user commitment associated with long-term entry access rights is a liability to pay the associated charges, with the associated security arrangements to be developed by the Working Group in accordance with the Best Practice Guidelines for Gas and Electricity Network Operator Credit Cover;
  - The rights can be extended by application at any time;
  - New generators (and any existing generators requesting an increased level of long-term entry access) will be required to book a defined period of years of rights (the “trigger period”) and provide the associated user commitment (which may be approximately equivalent to 50% of the costs). This will replace the existing “final sums” regime;
- 1.4 The CAP165 original proposal also includes separate arrangements for infrastructure comprising generators’ local connections, including the appropriate User commitment (which may be approximately equivalent to 100% of costs).
- 1.5 Following consideration of CAP165 by the Working Group, seven Working Group Alternative Amendments were proposed:
  - **Working Group Alternative Amendment 1 (WGAA1)** was proposed by National Grid, and represents only a minor change to the original, in that transmission access rights would be defined on a nodal, rather than zonal, basis;
  - **Working Group Alternative Amendment 2 (WGAA2)** was proposed by a Working Group member and features a system of fixed cost reflective final sums to give pre-commissioning User commitment. Access rights would be defined on a nodal, rather than zonal, basis;
  - **Working Group Alternative Amendment 3 (WGAA3)** was proposed by a Working Group member and features a four year rolling commitment period for post-commissioning generators. Access rights would be defined on a nodal, rather than zonal, basis;
  - **Working Group Alternative Amendment 4 (WGAA4)** was developed from a consultation request and features an enduring right with a four year minimum booking for new users and a fifteen month notice for reduction in TEC;
  - **Working Group Alternative Amendment 5 (WGAA5)** was developed from a consultation request and features an eight year rolling

commitment, fixed cost reflective final sums to give pre-commissioning liability with scaled pre commissioning security;

- **Working Group Alternative Amendment 6 (WGAA6)** was developed from a consultation request and is based on WGAA3 with a two year notice period; and
- **Working Group Alternative Amendment 7 (WGAA7)** was developed from a consultation request and is based on WGAA3 with user commitment being restricted to the period seven years prior to the completion date.

### Working Group Recommendation

1.6 The Working Group believes its Terms of Reference have been completed and that CAP165 has been fully considered subject to legal text. The Working Group recommends to the CUSC Panel that:

- A Consultation Report containing the CAP165 Original Amendment, WGAA1, WGAA2, WGAA3, WGCR1, WGCR2, WGCR3 and WGCR5 should proceed to wider Industry Consultation as soon as possible.
- The Working Group Report is accepted by the CUSC Panel and the Working Group is disbanded.

1.7 The Working Group voted on whether they believed the original, the Working Group alternatives and the alternatives developed by the Working Group from the consultation requests were **better than the current baseline**. The results of the vote are described in the following table:

Proposal	Better	Not better	Abstained
<b>Original</b>	3	9	0
<b>WGAA1</b>	2	10	0
<b>WGAA2</b>	4	8	0
<b>WGAA3</b>	6	6	0
<b>WGCR1 (WGAA4)</b>	6	6	0
<b>WGCR2 (WGAA5)</b>	5	7	0
<b>WGCR3 (WGAA6)</b>	6	6	0
<b>WGCR4</b>	2	10	0
<b>WGCR5 (WGAA7)</b>	6	6	0
<b>WGCR6</b>	2	7	3

1.8 The Working Group voted on whether they believed the Working Group alternatives and the alternatives developed by the Working Group from the consultation requests were **better than the original proposal**. The results of the vote are described in the following table:

Proposal	Better	Not better	Abstained
Original	-	-	-
WGAA1	11	1	0
WGAA2	6	5	1
WGAA3	11	1	0
WGCR1 (WGAA4)	9	2	1
WGCR2 (WGAA5)	6	6	0
WGCR3 (WGAA6)	10	2	0
WGCR4	5	6	1
WGCR5 (WGAA7)	8	4	0
WGCR6	3	8	1

- 1.9 The majority of the Working Group believed WGAA1, WGAA3, WGCR1, WGCR3 and WGCR5 were better than the original. The Chair with the support of the Working Group took forward proposals which had 6 votes in support. This means that WGAA2 and WGCR2 have also been taken forward.
- 1.10 The Working Group voted on which of the proposals they believe best facilitates the applicable CUSC Objectives. The results of this vote is described in the following table:

Proposal	Best
Original	0
WGAA1	1
WGAA2	2
WGAA3	2
WGCR1 (WGAA4)	3
WGCR2 (WGAA5)	1
WGCR3 (WGAA6)	0
WGCR5 (WGAA7)	3

### Amendment Panel's View

- 1.11 A majority of 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. Some Panel members expressed concerns about the lack of cost benefit analysis contained in the report.

### National Grid's View

- 1.12 National Grid's initial view is that all of the proposed alternatives and the CAP165 original amendment would better facilitate the applicable CUSC objectives when compared against the current baseline. This is due in the most part to the fact that all of the options presented would either:

- (a) offer a finite right and with it the ability to accurately account for the rescission of long term rights by an existing generator when planning transmission works on the GB Transmission System or;

- (b) the fact that the proposed notice periods to be given by existing users to rescind existing transmission access rights (a range from 15 months to 8 years) would be significantly in excess of the current 5 day minimum requirement.
- 1.13 Other Alternatives also propose an equitable system of liabilities for pre- and post-commissioning generators, again another benefit that would in National Grid's view better facilitate applicable CUSC objective (b).
- 1.14 National Grid is not generally in favour of the amendments which utilise a Pre Commissioning Liability. While National Grid is generally content to forecast Final Sums liabilities at the time that a connection offer is prepared we are not content with the proposal that if actual liabilities incurred are less than forecast then the difference is refunded to the User whereas if actual liabilities are in excess of forecast that liability is borne by National Grid and thence the industry. This in National Grid's view would mean that in the long term this would either cause a general under-recovery of pre-commissioning liabilities from terminating Users and thus result in a cross subsidy of new users by existing users. Alternatively the proposal would drive National Grid to very conservatively forecast Pre Commissioning Liabilities and thus require new Users to provide greater amounts of pre-commissioning security, which could be perceived as a barrier to entry, frustrating applicable CUSC objective (b).
- 1.15 National Grid has also stated through the Working Group discussions that a six year signal of the rescission of long-term rights would be required. This is based upon a normal 6-year lead time for the specification, planning and construction of transmission construction works. From a purely transmission perspective then any alternative that does not give a minimum of a 6 year signal will inevitably result in less than the theoretical maximum saving in transmission works being able to be achieved. However National Grid also recognises that there may be financial benefits associated with a shorter notice period for generators although National Grid is unable to quantify this impact and thus judge the overall optimal notice period for the industry as a whole.
- 1.16 On balance National Grid's initially favoured option is therefore WGAA1.

## **2.0 PURPOSE AND INTRODUCTION**

- 2.1 This is a consultation document issued by National Grid under the rules and procedures specified in the Connection and Use of System Code (CUSC) as designated by the Secretary of State.
- 2.2 Further to the submission of Amendment Proposal CAP165 and the subsequent evaluation by Transmission Access Working Group 2, this document seeks views from industry members relating to the Amendment Proposal and the seven Working Group Alternative Amendments.
- 2.3 This consultation document outlines the discussions held by the Working Group, the responses to the Working Group Consultation and the nature of the CUSC changes that are proposed. Representations received in response to this consultation document will be included in National Grid's Amendment Report that will be furnished to the Authority for their decision.

### **The Transmission Access Review Working Groups**

- 2.4 CAP165 was proposed by National Grid and submitted to the Amendments Panel for their consideration on 25<sup>th</sup> April 2008.
- 2.5 In a change from normal practice, CAP165 was one of six Amendment Proposals which the CUSC Amendments Panel divided between two Working Groups under the banner of the Transmission Access Review. Working Group 1 has considered CAPs 161-164 and Working Group 2 CAPs 165 and 166. The Panel also directed the formation of a third Working Group (known as "Working Group 3") to assess some enabling changes which underpin a number of these CAPs related to transmission charging proposals under the Transmission Charging Methodologies Forum (TCMF).
- 2.6 A combination of two, or more of these six CAPs collectively or, potentially in the case of Connect and Manage, individually, could be considered to constitute a model of transmission access reform. At the time of the original six proposals there were broadly speaking three models: (i) Connect and Manage (CAP164); (ii) Evolutionary Change (CAPs 161, 162, 163 and 165); and (iii) Evolutionary Change with auctions (CAPs 161, 162, 163 and 166). However, the intention is that all six CAPs can be implemented individually or in certain combinations with each other.
- 2.7 The Working Groups have also been constituted to deliberate on related transmission charging proposals under the Transmission Charging Methodologies Forum (TCMF). This consultation is concerned with the CUSC-related issues of CAP165, although references are made to charging where this aids understanding of the proposed Amendment. Charging issues are being consulted on in a parallel pre-consultation.
- 2.8 The Amendments Panel agreed that Working Group 2 would work towards submitting a report on CAP165 back to the CUSC Panel within 3 months, inclusive of a period of Working Group Consultation. An extension of 2 months to this timetable was granted by the CUSC Panel on 25 July 2008 after a request from the Chair of Working Group 2. Furthermore, the Authority's approval of CAP 160 during the assessment period alters the way in which the Working Group considers Alternatives raised in the consultation process.

- 2.9 Working Group 2 first met on 14 May 2008. At the first meeting the members of the Working Group amended and agreed the Terms of Reference. A copy of the Terms of Reference, subsequently accepted by the June CUSC Panel, is provided in Annex 1.
- 2.10 Working Group 2 also agreed an initial work plan, which was revised and extended as required during the Working Groups' work.
- 2.11 Working Group 2 considered the issues raised by CAP165 and considered whether the amendment proposal, and some suggestions for potential Working Group Alternatives, better facilitated the Applicable CUSC Objectives as compared with the current version of the CUSC. Working Group 2 met 21 times during the assessment period for CAP165 and attendance is recorded for voting purposes in Annex 3. Each Working Group meeting was attended by CUSC Party-nominated members or their alternates, and invited experts.
- 2.12 Working Group 2 also drew on discussion in Working Group 3 mainly regarding the definition of local works. These discussions are covered in this report as Working Group 2 adopted them as part of CAP165 Original and its seven WGAAs.
- 2.13 The CAP165 Working Group Report was submitted to the CUSC Amendments Panel meeting on 21 November 2008. Following evaluation and consultation by the Working Group, the Amendments Panel determined that CAP165 was appropriate to proceed to wider industry consultation by National Grid.
- 2.14 This consultation document outlines the discussions held by the Working Group, the responses to the Working Group Consultation and the nature of the CUSC changes that are proposed. In addition it also includes the discussions of Working Group 3, as they relate to CAP165.
- 2.15 Representations received in response to this consultation document will be included in National Grid's Amendment Report that will be furnished to the Authority for their decision.
- 2.16 This Consultation document has been prepared in accordance with the terms of the CUSC. An electronic copy can be found on the National Grid Website, [www.nationalgrid.com/uk/Electricity/Codes/](http://www.nationalgrid.com/uk/Electricity/Codes/), along with the Working Group Report and the Amendment Proposal form. This document invites views upon CAP165 and the **closing date is for responses 15<sup>th</sup> December 2008**.

### **3.0 PROPOSED AMENDMENT**

3.1 This section describes National Grid's original amendment proposal and includes clarifications that have resulted from Working Group discussions. The full text of the original amendment proposal can be found in Annex 3.

#### **3.2 Defect**

3.2.1 This amendment proposal seeks to address a number of defects which in the view of the proposer of CAP165, exist with the current entry access arrangements.

3.2.2 The current transmission access arrangements, for post-commissioning generators do not provide any certainty for Transmission Owners, in that such Users have a rolling option to renew their rights to access the transmission system on an annual basis. Should they wish to decline this option, they have the ability to give as little as five days' notice. This uncertainty can lead to inefficient investment signals for transmission assets in that the planning of incremental capacity can take little, if any, account of the potential future release of existing capacity. The ability to reallocate existing capacity would address this defect, and would also promote effective competition in the generation of electricity, in that new entry would be facilitated through the certain release of existing rights.

3.2.3 The current final sums arrangements for receiving User commitment and security from pre-commissioning Users have a number of defects which this amendment aims to rectify:

- The final sums arrangements are defined outside the commercial frameworks so do not provide transparency.
- Final sums leave the total risk on the newly connecting User so the level can be perceived as a barrier to entry.
- As final sums are directly linked to actual project costs, and to the presence of other prospective connectees, they also have a level of volatility which may be unacceptable to some new Users.

#### **3.3 Principles**

3.3.1 This CAP165 amendment proposal seeks to introduce temporally defined finite long term entry access rights, and associated User commitment. This would reform the current arrangements for both pre- and post-commissioning generators when they access the transmission system.

3.3.2 It is proposed that existing generators would nominate the number of (whole financial) years for which they require long-term entry access rights to the GB transmission system. This would be underpinned by User commitment in the form of a liability to pay associated charges. The commitment would be for any period requested by the User (i.e. there would be no rolling time limit), and rights could be extended by application at any time.

3.3.3 Pre-commissioning generators (and any post-commissioning generators requesting an increased level of long-term entry access) requiring transmission works to be undertaken in order to be connected to the transmission system would be required to book a defined minimum number of years of entry access rights, and provide the associated User Commitment (which would be approximately equivalent to 50% of the cost of providing the incremental capacity). This would replace the existing final sums and interim generic User Commitment regime.

- 3.3.4 The above requirements would apply to access to the wider transmission system. Separate arrangements would be put in place for infrastructure comprising generators' local connections to the wider system. The User Commitment arrangements would be consistent with the arrangements for wider access. The interaction between local and wider works is considered in further detail in section 3.6 of this report.
- 3.3.5 It is further proposed that long-term entry access rights to the transmission system be defined on a zonal basis, such that each User can share capacity between its power stations within that zone on a real time basis at a 1:1 exchange rate within that defined zone. These zones are based on the output of Working Group 3 discussions.
- 3.3.6 The proposer of CAP165 believes that, as pre- and post-commissioning generators would be required to provide equivalent liabilities for wider access, equitable treatment of the two groups would be ensured. The finite aspect of the transmission access rights would help to provide better investment signals to TOs and would allow existing capacity to be reallocated. In addition, replacement of the current final sums methodology with the booking of a trigger period of a minimum number of years' worth of entry capacity access rights would promote transparency and certainty.

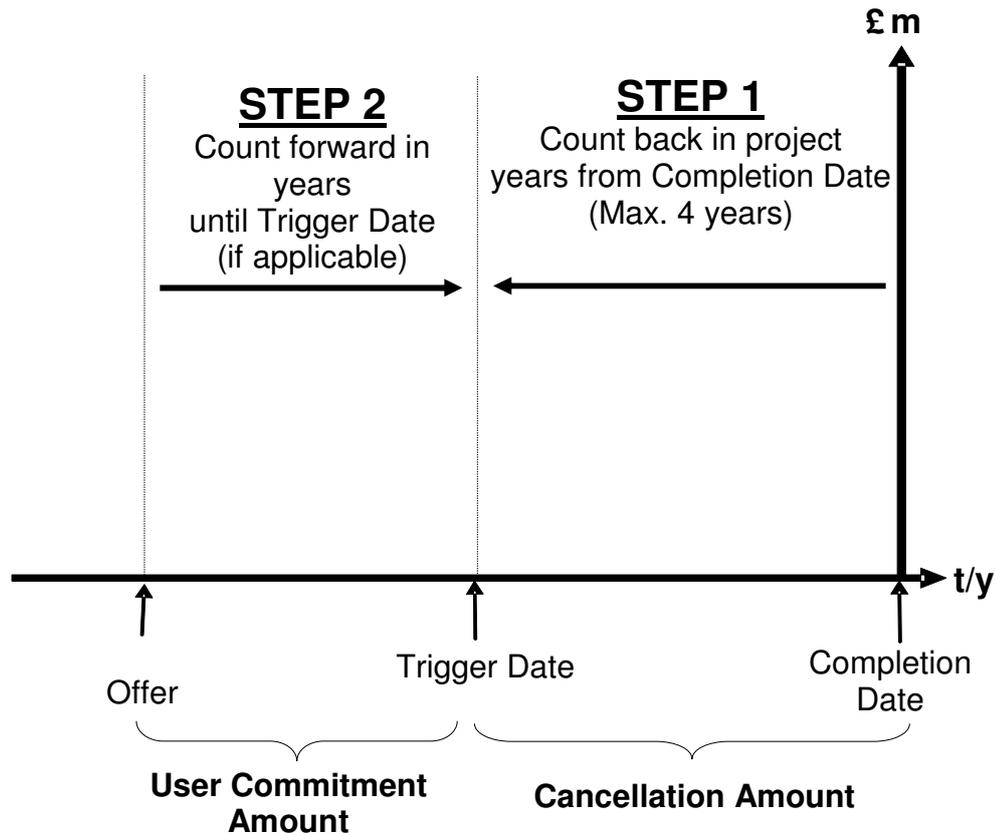
### **Connection Process**

- 3.3.7 Under CAP165 Users applying for new or increased wider transmission entry access rights will apply using the existing application process as currently defined in the CUSC. However, the user would apply for the access rights on a zonal basis rather than at a node.
- 3.3.8 When the application has been received by National Grid, an offer will be made within 3 months which will include a Completion Date (the date at which the User will be entitled to firm rights to use the transmission system and be liable for Generation TNUoS charges). This will be the earliest time, in National Grid's best view, that the relevant transmission capacity to accommodate this user can be delivered.
- 3.3.9 The offer will also contain a Trigger Date. The Trigger Date is defined by National Grid as GBSO and specified in the Construction Agreement such that the Completion Date can be achieved and will be no more than 4 years prior to the Completion Date. Whilst the intention is to accurately define the Trigger Date at the outset, the date may vary to reflect delays to the construction programme or construction works. It is further dependent on whether consents are required for the transmission construction works.
- 3.3.10 Where the delivery of the Completion Date requires construction works and no consents are needed, and the Completion Date is more than 4 full years from the date of the Offer, the Trigger Date is 4 full years from the Completion Date. Where the Completion Date is within 4 full years, the Trigger Date will effectively become the last date upon which the User can accept its offer.
- 3.3.11 Where consents are required, if the consents are forecast to be granted more than four years before the Completion Date then the Trigger Date is four full years from the Completion Date. If the consents are forecast to be granted less than four years before the Completion Date the Trigger Date is the date that consents are forecast to be granted.

### **3.4 User Commitment Liabilities for Pre-Commissioning Generators**

- 3.4.1 The CAP165 proposed arrangements for pre-commissioning generators (and for post-commissioning generators that request additional wider entry access rights) requiring transmission works seek to replace the current liabilities for cost reflective final sums with non-refundable generic liabilities. An aim would also be to share the risk of inefficient investment associated with generation termination between the generators that introduce risk, and all other Users.
- 3.4.2 The generic liabilities incurred would be a non-refundable termination charge equal to a multiple of the relevant generation TNUoS tariff. It is envisaged that the multiplier could be recalculated in subsequent transmission price control periods, but initially would be set at eight; i.e. 8 x TNUoS. These arrangements are very similar to those proposed under CAP131 (which uses a multiplier of six). However, the key difference between CAP131 and CAP165 is that under CAP165, this multiplier would set not just the termination liability pre-commissioning but also the minimum number of years of wider entry access rights to the transmission system that must be booked following commissioning. Therefore, under CAP165 the potential termination liability immediately prior to commissioning and immediately post commissioning would be equivalent (at eight years' worth of TNUoS). Further details regarding the post commissioning User commitment are considered later in this report.
- 3.4.3 These arrangements would only apply to wider transmission entry access rights. Separate, but similar, arrangements would apply to infrastructure comprising generators' local connections to the wider system. Additionally, for parties not booking entry access rights (e.g. DNOs), the current cost reflective final sums arrangements will continued to be applied for transmission reinforcement works.
- 3.4.4 The offer will set out two types of payments that would be due in the event of termination: User Commitment Amounts before the Trigger Date, and Cancellation Amounts between the Trigger Date and the Completion Date. The process is illustrated in the diagram below:

Calculation of timescales for pre-commissioning termination payments



3.4.5 It can be expected that following the Trigger Date, the majority of applications for new or increased wider entry access rights will result in a Completion Date within four years. It should be noted that under the CAP165 arrangements, National Grid will retain the right in the Construction Agreement to delay the Completion Date owing to unforeseen circumstances beyond its control.

**User Commitment Charge**

3.4.6 Between the Offer Date and Trigger Date, termination of wider transmission entry access rights requested would result in the levying of a User Commitment Charge based on User Commitment Amounts. The User Commitment Charge will be non-refundable.

3.4.7 User Commitment Amounts would be calculated using a generic methodology, based on a value of £1/kW commencing upon signature of the Construction Agreement. This would increase by £1/kW following each full year up to the Trigger Date, subject to a cap of £3/kW. Should a User terminate its Construction Agreement prior to the Trigger Date the User's User Commitment Charge would therefore be calculated as follows:

$$\text{User Commitment Charge} = \text{TEC}_r \times \text{UCAM}_t$$

Where:

- *TEC* is the reduction in wider entry access rights in kW.

- $UCAM_t$  is the relevant User Commitment Amount which varies according to the number of full years from the Offer Date:
  - In the first year (i.e.  $t = 1$ )  $UCAM_t = \text{Min} (\text{£}1/\text{kW}, TA \times 25\%)$ , where TA is the Termination Amount (see below);
  - Where  $t = 2$ ,  $UCAM_t = \text{Min} (\text{£}2/\text{kW}, TA \times 25\%)$ ; and
  - Where  $t \geq 3$ ,  $UCAM_t = \text{Min} (\text{£}3/\text{kW}, TA \times 25\%)$ .

3.4.8 In negative TNUoS charging zones or zones with marginally positive charges 25% of the Termination Amount described below will be less than £3/kW. In such zones User Commitment Amounts would be capped to 25% of the Termination Amount. This would lead to User Commitment Amounts being zero in negative charging zones.

3.4.9 User Commitment Amounts where they are calculated by reference to TNUoS tariffs will be calculated and fixed at the time the connection offer is signed. The actual TNUoS tariff used will be that TNUoS tariff that would have prevailed on the last day that that offer could have been signed.

### Cancellation Charges

3.4.10 Under CAP165 once the Trigger Date has been reached, termination of wider transmission entry access rights requested would result in the levying of a Cancellation Charge based on Cancellation Amounts. The Cancellation Charge will be non-refundable.

3.4.11 The Cancellation Amount in each year is a percentage of the Termination Amount, which is the higher of zero and eight times the relevant TNUoS charges. The Cancellation Charge would therefore be calculated as follows:

$$\text{Cancellation Charge} = TEC_r \times CAM_t$$

Where:

- $TEC_r$  is the reduction in wider transmission entry access rights in kW.
- $CAM_t$  is the relevant 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.  $t$ )  $CAM = TA \times 100\%$ , where TA is the Termination Amount;
  - Where  $t = -1$ ,  $CAM = TA \times 75\%$ ;
  - Where  $t = -2$ ,  $CAM = TA \times 50\%$ ; and
  - Where  $t = -3$ ,  $CAM = TA \times 25\%$ .

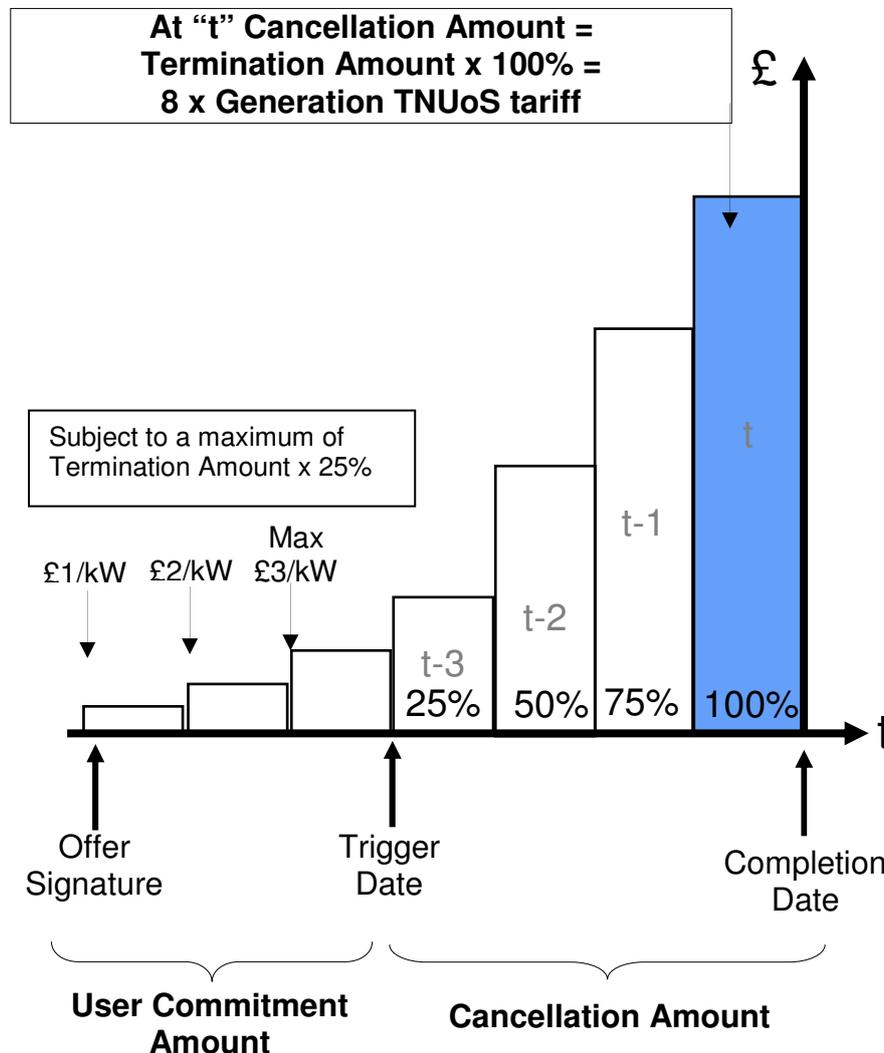
$$\text{Termination Amount} = \text{Max} (0, (\text{GenTNUoS}_z \times X))$$

Where:

- $\text{GenTNUoS}_z$  is the relevant zonal Generation TNUoS tariff calculated and fixed at the time the connection offer is signed. The actual TNUoS tariff used will be that TNUoS tariff that would have prevailed on the last day that that offer could have been signed. If a project is not located in a Generation TNUoS Charging Zone, then the appropriate Generation TNUoS 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 eight, although it may be appropriate that this be amended in subsequent transmission price control periods.

3.4.12 The liabilities described above can be summarised in the diagram below:

Generic capacity reduction Liabilities for new or increased wider entry access rights



3.4.13 Charges based on User Commitment Amounts and Cancellation Amounts would not apply to projects where there are no transmission asset works.

**Capacity Reduction Charges**

3.4.14 In addition to the above charges applicable at termination of a User's Construction Agreement, Capacity Reduction Charges will also become liable if the User reduces its wider transmission access rights prior to the Completion Date or Trigger Date.

3.4.15 Should a User reduce its wider transmission access rights prior to the Trigger Date it shall become liable to pay the following Capacity Reduction Charge:

$$\text{Capacity Reduction Charge} = \text{UCAM}_t \times (\text{TEC} - \text{TEC}_r)$$

- Where the UCAM is calculated in accordance with 3.4.7 above;
- TEC is the TEC figure (expressed in kW) stated in Appendix C to the Users Bilateral Agreement effective immediately prior to the requested reduction in TEC; and,

- $TEC_r$  is the revised TEC figure (expressed in kW) following the TEC reduction

3.4.16 Should a User reduce its wider transmission access rights on or after the Trigger Date but before the Completion Date it shall become liable to pay the following Capacity Reduction Charge:

$$\text{Capacity Reduction Charge} = CAM_t \times (TEC - TEC_r)$$

- Where  $CAM_t$  is calculated in accordance with paragraph 3.4.11
- TEC is the TEC figure (expressed in kW) stated in Appendix C to the Users Bilateral Connection Agreement or effective immediately prior to the requested reduction in TEC
- $TEC_r$  is the revised TEC figure (expressed in kW) following the TEC reduction

### **Security**

3.4.17 The introduction of generic User Commitment Charges and Cancellation Charges defined in the CUSC, to replace the existing final sums regime defined in 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.

3.4.18 CAP165 proposes move the security arrangements from Construction Agreements and to instead add the applicable User Commitment Charges or Cancellation Charges to each User's Security Requirement, as defined in paragraph 3.22.2 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.

3.4.19 In the event a Capacity Reduction Charge becomes payable, the amounts secured in respect of the User Commitment Charge or Cancellation Charge will be re-calculated by reference to the new TEC level, post-reduction.

### **Transition**

3.4.20 If CAP165 is approved, existing Users will have the choice to remain in their existing security and liability arrangements or to move across onto the new CAP165 arrangements. Users applying for a new connection or an increase in wider transmission access rights post any implementation of CAP165 will be subject to the CAP165 arrangements.

3.4.21 Should existing Users choose to migrate to the new CAP165 arrangements this will require a Trigger Date to be set, and the calculation of User Commitment Charges or Cancellation Charges (as applicable), for all pre-commissioning projects in progress at implementation. The security required for each User will be calculated in accordance with the revised Section 3 of CUSC, and therefore additional Security Cover may be required. Equally, in situations where less cover is required, security will be returned to Users.

3.4.22 All such Users with such projects will be invited to nominate to the number of (whole) financial years worth of wider transmission entry access rights that will be required post-commissioning, subject to a minimum of eight years. This process is described more fully in the next section.

### **Changes to the Trigger Date or Completion Date – Impact on Pre-Commissioning Liabilities**

- 3.4.23 Where the Construction Programme or the Construction Works or Transmission Entry Capacity subsequently change from that in the original Construction Agreement the following principles will apply in respect of reassessing the Trigger Date and the Cancellation Charge.
- 3.4.24 Where such change is as a result of The Company's exercise of its rights under the Construction Agreement then:
- Where there is a delay to the Completion Date, and the Trigger Date has not passed there will be a corresponding delay to the Trigger Date and the profile of the User Commitment Amount and the Cancellation Amount revised accordingly in line with the above principles. If the Trigger Date has already passed, the profile of the Cancellation Amount will be revised accordingly on the basis of the above principles by reference to the number of full 12-month periods from the new Completion Date.
  - Where there is no delay to the Completion Date, but the Construction Works change, The Company will review the appropriateness of the Trigger Date and if appropriate, change this. The profile of the User Commitment Amount and Cancellation Amount will be revised on the principles set out above to reflect the change in Trigger Date.
  - Where there is a reduction in a User's Transmission Entry Capacity the Cancellation Charge shall be revised to reflect the reduced MWs.
- 3.4.25 A revised Appendix R to a User's Construction Agreement will be issued by The Company to the User showing the new profile.
- 3.4.26 Where such change is as a result of the User's request a revised Appendix R to a User's Construction Agreement will be issued by the Company to the User. Notwithstanding any change in the Construction Works or Completion Date:
- Where the revised Construction Programme alters the period of full years between the date of signature of the original Construction Agreement and the Trigger Date the User Commitment Amount will remain at the amount at the time the user requested the change until it is due to rise based on the revised Appendix R reflecting the revised Construction Programme; or
  - The Cancellation Amount will be frozen at the prevailing level and remain at that level for the period of the slippage.

### **3.5 User Commitment for Post-Commissioning Generators**

- 3.5.1 It is proposed, under CAP165, that wider transmission entry access rights for post-commissioning generators will be defined on temporal, as well as capacity, basis. When applying for new, or additional, transmission access rights, Users will be required to nominate for how many years they require such rights. When the provision of these rights requires transmission works, a minimum booking period, equal to the multiplier used to derive the Termination Amount (initially eight years), will apply.
- 3.5.2 Users will always have the opportunity to apply to extend the period of wider transmission entry access rights held, via a Modification Application. However, with CAP165 they will have no priority or option on such rights, and therefore the rights may have been reallocated to another user in the interim.

- 3.5.3 Users will be liable for all (TNUoS) charges associated with the full period of their booking. A User that wished to terminate its rights, therefore, would be required to pay a fee as follows:

$$\text{Wider Access Cancellation Charge} = \text{TEC} \times \text{Max}(0, \text{GenTNUoS}_z) \times n$$

Where:

- $\text{TEC}$  is the User's wider transmission entry access rights in kW.
- $\text{GenTNUoS}_z$  is the relevant prevailing zonal Generation TNUoS tariff.
- $n$  is the number of years of the booking remaining.

- 3.5.4 A User that wished to reduce its rights would be required to pay a fee as follows:

$$\text{Wider Access Reduction Charge} = \text{TEC}_r \times \text{Max}(0, \text{GenTNUoS}_z) \times n$$

Where:

- $\text{TEC}_r$  is the reduction in wider transmission entry access rights in kW.
- $\text{GenTNUoS}_z$  is the relevant prevailing zonal Generation TNUoS tariff.
- $n$  is the number of years of the booking remaining.

- 3.5.5 A User that no longer had a requirement for booked transmission access rights might alternatively decide to trade such rights to another User, and this would be facilitated by the existing provisions of the CUSC.

- 3.5.6 It is proposed that no transmission access rights would be withdrawn from existing Users in the transition to the CAP165 arrangements. Existing generators with TEC will be offered an equivalent finite long-term wider transmission entry access right. During the CAP165 transition, such generators will be invited to nominate the number of whole financial years for which they require long term transmission access rights. The end date of the rights (always a 31 March) would be recorded in Appendix C of the User's Bilateral Connection Agreement (BCA), or Bilateral Embedded Generation Agreement (BEGA) for embedded generators greater than 100MW.

## 3.6 Interaction between Local and Wider Works

### Definition of Local Capacity Nomination

- 3.6.1 It is proposed that a local access product be introduced, separate from wider access rights. 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 must not exceed the Connection Entry Capacity (CEC) of the generator to avoid damage to the local transmission assets.

- 3.6.2 LCN access will 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; and
- 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.

### Connection Process

- 3.6.3 The concept of LCN will be introduced into CUSC Exhibit B: Connection Application. A local connection application will be progressed under the same process as an existing local and wider connection application.
- 3.6.4 Applications for an increase in LCN may be made by new or existing generators. LCN rights will be enduring, that is to say they will not have a finite end date associated with them, but will endure until the generator signals its intention to National Grid that it wishes to rescind them.
- 3.6.5 Termination or reduction of the requested LCN prior to the completion date would result in the levying of a Local Cancellation Charge, based on Local Cancellation Amounts. Note that there are no Local User Commitment Charges envisaged as it is deemed unlikely that the works to accommodate LCN will begin in advance of the wider works. The Local Cancellation Charge would be non-refundable.
- 3.6.6 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 Cancellation Charge would therefore be calculated as:

$$\text{Local Cancellation Charge} = \text{LCN}_t \times \text{LCAM}_t$$

Where:

- $\text{LCN}$  is the Local Capacity Nomination in kW.
- $\text{LCAM}_t$  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.  $t$ )  $\text{LCAM} = \text{LTA} \times 100\%$ , where LTA is the Local Termination Amount;
  - Where  $t=-1$ ,  $\text{LCAM} = \text{LTA} \times 75\%$ ;
  - Where  $t=-2$ ,  $\text{LCAM} = \text{LTA} \times 50\%$ ; and
  - Where  $t=-3$ ,  $\text{LCAM} = \text{LTA} \times 25\%$ .

$$\text{Local Termination Amount} = \text{Max} (0, (\text{LocGenTNUoS}_n \times X))$$

Where:

- $\text{LocGenTNUoS}_n$  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.

3.6.7 Local Cancellation Amounts will be calculated using a fixed value of the Local Generation TNUoS tariff. This value will be fixed at the prevailing local generation TNUoS tariff at the last date at which a Construction Agreement could be signed. Local Cancellation Charges would not apply to projects where there are no transmission asset works.

### **Local Capacity Reduction Charges**

3.6.8 In addition to the above charges applicable at termination of a User's Construction Agreement, Local Capacity Reduction Charges will also become liable if the User reduces its LCN prior to the Completion Date.

3.6.9 Should a User reduce its LCN on or after the Trigger Date but before the Completion Date it shall become liable to pay the following Local Capacity Reduction Charge:

$$\text{Local Capacity Reduction Charge} = \text{LCAM}_t \times (\text{LCN} - \text{LCN}_r)$$

- Where  $\text{LCAM}_t$  is calculated as in 3.6.6 above
- LCN is the LCN figure (expressed in kW) stated in Appendix C to the Users Bilateral Connection Agreement or effective immediately prior to the requested reduction in LCN
- $\text{LCN}_r$  is the revised LCN figure (expressed in kW) following the LCN reduction

### **Pre-commissioning Security**

3.6.10 The introduction of generic Local Cancellation Charges, defined in the CUSC, to replace the existing final sums regime, defined in 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.

3.6.11 It is therefore proposed to add the applicable Local Cancellation Charge 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.

3.6.12 In the event a Capacity Reduction Charge becomes payable, the amounts secured in respect of the User Commitment Charge or Cancellation Charge will be re-calculated by reference to the new TEC level, post-reduction.

### **Transition**

3.6.13 In the transition to LCN, generators would notify National Grid of their desired LCN in advance of a pre-defined date. The value notified would be limited to a generator's CEC. In the event that a generator did not notify National Grid of its desired LCN, the current value of TEC would be used as a default value. In the instance that multiple generators wish to share LCN, a process for notification will be required.

## **4.0 SUMMARY OF WORKING GROUP DISCUSSIONS**

- 4.1 Recognising that the role of the Working Group was to assess the CAP165 amendment proposal against the Applicable Objectives, the Working Group considered various issues. The key issues considered were the nature and definition of finite long-term transmission entry access rights; the transition arrangements; the participation of non-physical parties in access arrangements; User commitment; security; Consequential Charging Modifications; Generation Zoning; Arrangements for Local Connections and the Consideration of Working Group Alternative Amendment requests. The group also considered the interaction of CAP165 with the other CUSC modifications in the Transmission Access suite of amendments.
- 4.2 The Working Group discussions are summarised in this section of the report. All presentations given at Working Group meetings are included in Annex 6 of this document. The notes from the Working Group meetings are available on the National Grid website at:  
<http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandingsgroups/wg165-166/>
- 4.3 A separate Working Group was set up to consider supporting changes which affect several CUSC amendments including CAP165. The relevant discussions from that Working Group (known as "Working Group 3") are also summarised in this section of the report.

### **4.4 The Nature and Definition of Finite Long-term Entry Rights**

- 4.4.1 CAP165 proposes that the nature and definition of the finite long-term transmission entry rights will remain the same as current transmission access rights apart from the following key differences: (i) the rights will not (as they are currently under the CUSC) be automatically renewed each year and notification of relinquishing the rights will be provided by defining an end date of the long-term booking, (ii) the rights would be implemented zonally rather than nodally, (iii) the rights would be split into two components (local and wider) and (iv) final sums will be replaced by a generic commitment.
- 4.4.2 The Working Group considered the issue of the existing transmission access rights that CUSC Parties have. The group noted that currently Users have annual rights which are automatically renewed each year. This characteristic of Users' rights was considered further in the transition section of the report.
- 4.4.3 A number of objections were raised, by Working Group members, to being required to provide a date when a User would relinquish their transmission access rights. For example, some members of the group had concerns that projects would find it difficult to get finance if banks did not believe the power station could secure evergreen transmission access rights.
- 4.4.4 Some members of the group, noting that there were existing power stations connected to the GB transmission system were over 80 years old, considered that it may be hard for Users, at the outset of their projects, to know when their power station will close and therefore difficult for them to know how long to book long term transmission access rights. Other members of the group considered that Users would be in better position to predict when their power station might close compared to Transmission Owners. It was viewed that the knowledge that a plant will close in 30 years is not particularly useful for National Grid in their decision timescales. Information regarding what is happening in the next 2-15 years is of much more use in planning the system

than uncertain information many years hence. These concerns lead to the proposal of WGAA3.

- 4.4.5 The CAP165 amendment proposed blocks of (whole) financial years of transmission access bookings. The group discussed whether gaps should be allowed in the block booking of years of transmission access rights. It was considered by the group that no one would build a power station to use a one year gap. Being able to book gaps may unnecessarily complicate the arrangements and was felt by the Working Group to be of little, if any, practical use.
- 4.4.6 The group also felt upgrade and repair work could be unpredictable so a User would not know when booking a gap in their transmission access, when would be most appropriate. The User would have more flexibility if they bought one continuous block and tried to trade out any 'gaps' as an when they occurred this at a later date.
- 4.4.7 On the other hand if a number of power stations had booked gaps in their access arrangements during their original booking these gaps may be able to be aligned to allow access to the transmission system. It was decided that gaps would not be explicitly disallowed although the Working Group did not expect that they would be regularly used.
- 4.4.8 The group considered when the transmission access right would be available to be reallocated and when Users could extend the length of these rights. The proposal would allow the booking and extension of future transmission access rights at any time. For example, if a User booked access until 31<sup>st</sup> March 2015 they could at any time extend their access for April 2015 onwards. Similarly a new User would be able to book the access from April 2015 onwards at any time.
- 4.4.9 The group had some concern that this may lead to Users hoarding access for the longest time they could possibly need it or booking access for the amount of time they think it would take to get a new connection, so as to ensure the equivalent rights that exist now.
- 4.4.10 If a User extended their transmission access right and the access was still available minimal analysis would be required by the network planners. The group considered that the charge for extension should be reflective of the reduced costs.
- 4.4.11 The group discussed whether it was appropriate for the long term transmission access rights to be zonal by definition. National Grid proposed two options: (i) rights could be explicitly defined on a zonal basis or (ii) rights could continue to be defined nodally but cash out and overrun would be calculated zonally.
- 4.4.12 The group considered that zonal transmission access rights would be complex to manage if the zones changed. Some of the Working Group were concerned that small portfolio or single station users would be disadvantaged by zonal access rights if they were implemented without other sharing arrangements. A preference towards keeping the access right defined nodally was shared by the group. Zones were considered in greater detail by Working Group 3, whose deliberations are summarised later in this report.

- 4.4.13 The CAP165 Working Group discussions considered arrangements for wider access to the transmission network. Working Group 3 considered the appropriate arrangements for the local connection.
- 4.4.14 The group considered the appropriate arrangements, as part of CAP165, for Users who had requested wider transmission access and their local access was available at an earlier date. The group believe that it would be appropriate for these Users to be able to use short term transmission access products during the period before their wider works were completed. Short Term Transmission Entry Capacity (STTEC) and Limited Duration Transmission Entry Capacity (LDTEC) could potentially be used in this scenario as could (if implemented) the CAP161-CAP163 short term products.
- 4.4.15 If the wider works were completed before the local works the User would be unable to use the transmission system. It is considered that in the majority of connections the reinforcing of the wider infrastructure would be a longer project than building the local connection. Whilst unlikely this situation could potentially occur under the current arrangements.
- 4.4.16 Separating the local works from the wider works gives a new User more flexibility if their local connection is finished before their wider connection. Separating the works neither facilitates or frustrates Users whose wider works are finished before the local connection against the current baseline.

## **4.5 Transition**

- 4.5.1 Under CAP165 it is proposed that no transmission access rights would be withdrawn from existing Users. Existing generators with TEC including pre-commissioning users with connection agreements will be offered an equivalent long-term finite right under CAP165. During the transition period generators with existing TEC will be invited to nominate the number of whole financial years for which they require long term transmission access rights.
- 4.5.2 The majority of Working Group members believed that they currently had 'evergreen' transmission access rights, which they defined as rights that are automatically renewed each year given payment of TNUoS. The Authority representative stated their belief that rights under the CUSC were unclear, and that there are features of the existing rights which suggest they are not evergreen. Some Working Group members noted that whilst the rights currently have evergreen characteristics, such features could be changed by making an amendment to the CUSC (although not all such members believed that this would be appropriate).
- 4.5.3 Some members of the Working Group suggested that if this were the case, then rights to be allocated, via CAP165, could also, in the future, be removed (or fundamentally altered) via an amendment to the CUSC. The Authority representative stated that, in the case of future rights where parties have made a non-reversible financial commitment, this was unlikely to be appropriate. However, they did not believe that this was the case for existing rights.
- 4.5.4 Some members believed that if existing rights were evergreen, this would constitute a property right, and that it would not be appropriate, or even legal, for such rights to be changed solely by a CUSC amendment. However, the Working Group accepted the suggestion of the Chair that, without prejudice to those rights, in order to proceed with the work of developing and assessing

CAP165 they had to set aside their views of existing transmission access rights.

## **4.6 Non-physical Players**

- 4.6.1 Under the current (CUSC) arrangements, only physical parties; ie generators; can apply for Transmission Entry Capacity (TEC). Transmission access arrangements are codified in the Connection and Use of System Code (CUSC). Currently Interconnector Users and Suppliers are non-physical signatories of the CUSC, but these Users do not hold TEC. For holders of TEC, the CUSC is ingrained with technical obligations which Users with transmission entry access rights must fulfil (because such rights are implicitly linked to physical generation equipment). To allow non-physical parties to obtain (and then trade) transmission access a new category of non-physical User would need to be included, and the CUSC would need to be rewritten to separate access rights from Users' obligations.
- 4.6.2 One member of the Working Group questioned whether it would be permissible under the Acts of Parliament associated with the CUSC to change it to include non-physical players. They noted that if during the progression of the NETA and BETTA related legislation (which (i) introduced the CUSC and (ii) amended it) DTI/BERR, Ministers, the Government, or Parliament had opined on non-physical players then this might preclude what was being proposed. It was decided to seek a legal view on this from BERR. The group voiced concern that waiting for the answer could hold up the work of the group. However, it was noted that the work of the group could proceed and a response on this matter be provided (i) to the group or (ii) the CUSC Panel in due course.
- 4.6.3 For the avoidance of doubt, the Working Group agreed that if CAP165 were to include the ability for non-physical parties to obtain (and then trade) transmission access that this would be an Alternative (as this was not part of the (original) CAP165, as proposed by National Grid. The Working Group is not proposing, at this stage, that such an Alternative be developed. However, it would welcome views on this as part of this consultation.
- 4.6.4 Under a recent CUSC amendment, CAP150, a power station should be able to demonstrate the capability of delivering MW output equivalent to their requested (MW) TEC transmission access figure. CAP150 was brought in to avoid network investment in excess of the capability of generation assets. Non-physical players by definition would not be able to demonstrate this capability without an agreement with a physical party.
- 4.6.5 There is concern in the group that allowing non-physical parties to buy transmission access rights could lead to poor transmission investment signals. Under the current arrangements as a power company builds their power station the risk of them not connecting reduces as the assets are put in place. Often the investment in transmission assets for a new power station goes hand in hand with the power station assets being built. If transmission infrastructure is built to accommodate a purely financial commitment the revenue for the assets would be recovered (from the non-physical party who made the booking that caused the transmission investment) but the infrastructure may remain unused.
- 4.6.6 The group believed it would be difficult for the TO's to build assets to reinforce a zone without knowing specifically where a generator would be based as well as the associated technical aspects of that generator. Some

Working Group members suggested that the transmission system boundaries could be reinforced in this case, although this may not be the most appropriate investment, depending on who the eventual (physical) party was that used the rights.

- 4.6.7 Some members of the Working Group voiced concern that adding a third party into the trading of transmission access rights may increase the transactional costs. Such non-physical parties would also be aiming to make money through the trading of transmission access capacity, which would be likely to increase the overall cost to the electricity consumer.
- 4.6.8 The main aim of including non-physical players in the market would be to improve liquidity, and to address the concern that to exclude them would be to limit market activity. Non-physical participation is permitted in other markets, such as gas, though new capacity has to be booked at a certain point not in the form of deep reinforcement. However, the focus for the development of transmission access arrangements is to facilitate the more efficient use of the electricity transmission system. The group considered that it should aim to do this in the least complex manner and that creating a new commodity market should not be an aim in itself.
- 4.6.9 Therefore, given the additional complexity that would result from the inclusion of non-physical participants, the group believed that significant benefits would need to be demonstrated in order to justify such a move. Further, some members of the group considered that introducing non-physical players would not actually improve the liquidity of the market. There is also some concern in the group that allowing non-physical players to participate would increase the potential for gaming.
- 4.6.10 One member of the group argued that the exclusion of non-physical parties in the proposed long-term electricity access arrangements is discriminatory and against the spirit of a liberalised competitive market. However, it was pointed out by other members of the Working Group that the exclusion of non-physical parties has been a feature of the CUSC since it was designated by the Secretary of State in 2001 (and again in 2005) following consultations by Ofgem and (DTI)BERR.
- 4.6.11 Some members of the group considered that allowing all (physical and non physical) parties to participate in transmission access arrangements, improves competition and liquidity for capacity so that where there is a scarce resource, a useful investment signal is developed. Different capabilities may facilitate the entry to the market of new players particularly if they are small in size and cannot handle the risk associated with transmission access. Also, the generation market becomes more competitive as a variety of contractual forms are allowed to exist. For example, tolling arrangements and optimisation for merchant plants where capacity is managed by the “off-taker” who may very well be a “non-physical” player.
- 4.6.12 One member argued that some of the financial transmission rights markets in the US also permit non-physical players to participate. The reason for that is exactly that financial players, if subject to the same collateral and anti-hording requirements as the rest of the market participants, can bring additional liquidity to the market and offer risk management services to smaller participants that may not have the same capability.
- 4.6.13 A Working Group member considered the discussion on gaming is also overplayed. Capacity speculation within transmission networks is not viable

when there are appropriate anti-hoarding measures in place, and in any case there can be no provision on which class of market player may trade purely on a speculative basis. The Working Group member added, on the other hand no legislation can prevent non-physical players acting on the capacity market through a physical player and a “sleeve” arrangement. Taking as an example the UK Gas Market, abusive squeezes in the gas capacity market have not worked as capacity simply becomes free for those that can physically utilise it.

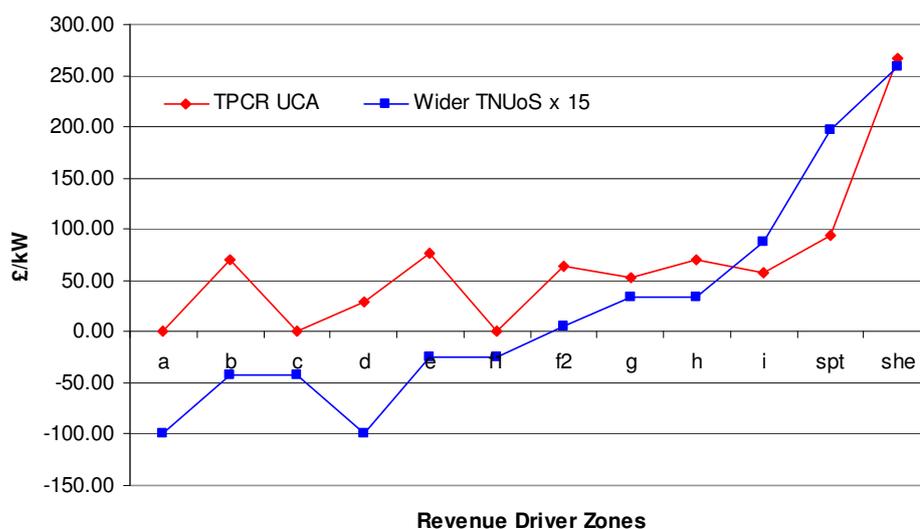
- 4.6.14 The majority of the group concluded that including non-physical players in the transmission access arrangements would provide liquidity advantages. However, in order to do so it would be essential that appropriate anti hoarding measures were put in place to avoid market abuse. Short term access arrangements could provide anti hording measures by ensuring that unused capacity was made available for free in the short term markets. Some Users would want to buy long-term transmission access rights as a hedge against the short term price of access.
- 4.6.15 The group believe that it may be necessary to have a Licence for non-physical Users. To include non-physical players would also involve changes to the CUSC. The group, mindful of the need for (i) anti hoarding measures and (ii) the fair trading of capacity, considered that arrangements similar to those applied to interconnector Users would need to be put in place if non-physical players were to be granted long term transmission access rights.
- 4.6.16 The majority of the Working Group believes that whilst non-physical players could provide some benefits it was not practical at this stage to include them in the proposed CAP165 amendment. It is considered that whilst the inclusion of non-physical players should not be taken forward as part of this amendment it would be a positive extension to the access arrangements at a future date.

## **4.7 User Commitment**

- 4.7.1 The CAP165 proposal suggests that Users book a finite period of whole financial years of access to the wider transmission network. The original proposal suggests that Users would provide commitment for this access through a liability to pay the relevant TNUoS charges. Where reinforcement is required to provide transmission access, the User would need to book a minimum number of years so that the TNUoS liability is approximately equal to half of the investment costs.
- 4.7.2 The liability would provide User commitment and would be backed up by some level of pre-commissioning security as considered in the Security section of this report. Being liable for half of the investment costs would mean that the risk of reinforcement assets becoming stranded would be shared equally between the User causing the investment and National Grid (if the revenue for the assets was disallowed) or all Users (if the revenue for the assets was allowed).
- 4.7.3 National Grid performed analysis to calculate the number of years of TNUoS which would be equivalent to half the reinforcement investment costs. The Unit Cost Allowance (UCA) revenue drivers were used as generic investment costs. These revenue drivers are a mechanism to reimburse TO's for access provided above the baseline.

4.7.4 On average, the UCA in a zone is fifteen times greater than the wider TNUoS charge (as calculated under Option A of GBECM -11<sup>1</sup>). The group considered that using whole financial years made the model most simple. This suggests that a User should have a liability to pay eight years of wider TNUoS charges to cover half of the costs of the investment made in wider works to accommodate them.

4.7.5 The following chart shows a plot of wider TNUoS charges multiplied by fifteen and the surplus revenue drivers from the licence. These values are shown in £/kW for each revenue driver zone. A map showing the revenue driver zones is included in Annex 5.



4.7.6 The correlation between Wider TNUoS and the surplus UCA is not very strong. This suggests that TNUoS charges may not give a very good proxy for investment.

4.7.7 There are several reasons why wider TNUoS is not an ideal proxy for investment. One factor is that TNUoS considers the annuitised cost of an asset over its life and takes into account the whole network. The revenue drivers are calculated using the average cost of specific projects expected to take place during a single price control.

4.7.8 Another key difference between TNUoS charges and revenue drivers is that revenue drivers are based on the gross cost of investing in the network. However, TNUoS charges are based on the net financial impact of adding one MW of capacity at a node. The gross project costs will always be zero if no reinforcement is required or positive if some reinforcement is required. The TNUoS charge is negative in areas where the number of MWkm as calculated by the transport model is decreased. This means that a generator connecting in the south of Britain would create a net reduction in flows on the transmission network.

4.7.9 Using TNUoS as the basis for User commitment would mean that no User commitment was provided in negative zones. Some members of the group suggested that if a zone has a negative TNUoS charge this indicates that there is spare capacity available in the zone. Clarification from National Grid

<sup>1</sup> GBECM – 11 - [http://www.nationalgrid.com/NR/rdonlyres/27F920CA-C678-4D91-A3D1-701E909BDAFB/28281/GBECM11ConcReport\\_final\\_HR.pdf](http://www.nationalgrid.com/NR/rdonlyres/27F920CA-C678-4D91-A3D1-701E909BDAFB/28281/GBECM11ConcReport_final_HR.pdf)

explained that a negative TNUoS charge was not indicative of spare capacity. Indeed, in some negative charging zones (for instance, the Thames Estuary) the provision of additional capacity may be relatively expensive.

- 4.7.10 The group therefore considered whether being liable for 50% of the UCA revenue driver would be a more appropriate method of providing User commitment for investment costs. The majority of the group considered that the UCA provided a better proxy for investment costs than TNUoS in England and Wales. However, in Scotland the revenue drivers are calculated using a different methodology, and there were concerns within the Working Group over the inconsistency of how the revenue drivers are calculated in England and Wales as compared to how they are calculated in Scotland. The main concern of the group was that any inconsistency could lead to an inequitable treatment of users in different regions of Great Britain.
- 4.7.11 Some Working Group members also noted that, under CAP165, the use of UCAs as a termination charge could result in a terminating generator paying more than the total TNUoS charges that they would be liable for over the remainder of their booking, and expressed concern that this could reduce the efficiency of plant exit from the system. As generating plant could avoid some of the termination charge by shutting but not terminating the access booking, a test was discussed in order to identify deemed terminations. However, it was suggested that this would fundamentally change the nature of the access product from one which entitles the holder to generate to one which obliges the holder to generate.
- 4.7.12 The Working Group therefore concluded that revenue drivers were not suitable to be used as the basis of User commitment.
- 4.7.13 Many Working Group members believed that the lack of historical evidence of asset stranding meant that pre-commissioning User commitment did not need to accurately reflect investment costs. Other Working Group members did not accept that past evidence meant that stranding would not be an issue in the future, but some of these members also accepted that the best overall model for CAP165 might be one that included arrangements for pre-commissioning User commitment that were not necessarily completely reflective of investment costs. In respect of the particular issue of negative charging zones, National Grid highlighted that, in any event, some commitment would be given in relation to the local connection.
- 4.7.14 Some Working Group members therefore concluded that, as CAP165 is focussed on providing certainty to National Grid by Users booking transmission access for a number of years and paying the appropriate charge, any termination charge should be based on TNUoS, and they therefore believed that the original CAP165 amendment (and WGAA1) was the appropriate response to the defect identified. However, other Working Group members believed that pre-commissioning User commitment should be reflective of investment costs, and, as wider TNUoS has been shown to be a poor proxy for wider investment costs and the revenue drivers have been shown to be unsuitable as a basis for User commitment, this concern led to the submission of WGAA2.

## **4.8 Security**

- 4.8.1 The Working Group considered a number of options for security, one of which was requiring security for the entire booked period of entry capacity. However, the group believed that this would be a significant barrier to entry

and that the value at risk would be significantly lower than the whole booking. The group discussed what value was really at risk.

- 4.8.2 It was considered that the actual value at risk was minimal in the case of a power station which had already been commissioned. If the power station owner entered insolvency the power station was likely to be taken over by another company which would take on the liability to pay the TNUoS charges going forward from the date of acquisition.
- 4.8.3 The TNUoS charges which cannot be recovered from a bankrupt User (e.g. from the date of the last unpaid TNUoS bill to the date when the new purchaser takes over and starts paying TNUoS going forward) will be socialised across all generators. It was noted that the cost, for these Users, of providing security to National Grid (for their TNUoS charges) was expected to outweigh the cost of socialising the non payment of TNUoS charges by bankrupt Users. The Working Group considered that the Users who will face these costs are best placed to decide to what extent they are happy to 'self-insure' each other.
- 4.8.4 The group considered that being aware of the cost to the industry of securing transmission access versus the cost to the industry of socialising stranded transmission assets costs would help the group make an educated decision on the appropriate amount of security that might need to be held.
- 4.8.5 Despite a number of examples over the years of CUSC Parties going into (i) administration (ii) bankruptcy or (iii) receivership, there has only historically been one instance where a power station entering administration has not been sold to a new owner within the same charging year, and this particular power station was in a negative charging zone. Therefore, there has been no historic socialised cost to Users. The group believed it would be difficult to quantify the exact costs of security for the whole booking period but considered that this could be in the region of tens of millions of pounds per annum.
- 4.8.6 Some members of the group were concerned that although there had been no historic instances of Users failing to pay their TNUoS charges the number of generators wishing to connect in the next decades is likely to be a period of unprecedented change. This suggests that extrapolating historic data into the future may not give us a true view of the potential risks.
- 4.8.7 The group considered whether it was appropriate to have different security arrangements for Users pre and post commissioning. The group considered that the risk profile of pre commissioning Users was different to that of a User post commissioning. The group considered that a post commissioning User would have a power station asset which in many cases could be resold so their risk was low until the power station came towards the end of its life. A pre commissioning User's risk profile changes throughout the life of a project. Although the risk will generally decrease as the User approaches commissioning, the risk is higher than a post commissioning User.
- 4.8.8 Some members of the Working Group believe that post commissioning Users should not have to provide any security, as is the case at present. It was considered that if a User with an existing power station were to enter administration in most cases another party would buy the assets and take on the liability to pay the outstanding TNUoS charges. This would mean that the value at risk was effectively zero.

- 4.8.9 Other members of the group considered that providing security for the balance of the current year's TNUoS charges was a reasonable compromise for most post commissioning Users between the cost of security and the potential risks. This solution would allow National Grid to recover all revenue in the period in which it was unable to change charges.
- 4.8.10 Some members of the group considered that providing security for the balance of the current year's TNUoS charges would be administratively onerous. This is because the level of security required would change each month. Some members argued that having a constant six months of security (representing the average over the year) would be more appropriate.
- 4.8.11 Some Working Group members considered that certain Users would represent a higher level of risk, consequently, it would be appropriate for these Users to provide a higher level of security. Such Users might include older power stations making long bookings (and therefore incurring a high liability). However, the group also noted the potential practical difficulties in formulating rules in this area, for instance in determining the age of a power station (which many have had certain equipment replaced, or may have even been replanted). The group therefore concluded that it would be infeasible to develop any arrangements in this area under CAP165, but highlighted this issue as an area for potential future development.
- 4.8.12 The Working Group concluded by majority that post-commissioning Users should not have to provide any security for TNUoS charges.
- 4.8.13 With regards to pre-commissioning Users, the majority of the Working Group considered that it would not be undue discrimination to ask pre-commissioning Users to provide a different level of security to post-commissioning Users given the differing risk profiles. Under some the CAP165 proposals and alternatives, pre-commissioning Users would therefore be expected to secure their full liability, in others a proportion of their liability based upon the perceived risk of default.

## **4.9 Consequential Charging Modifications**

- 4.9.1 CAP165 could impact on the Use of System Charging Methodology. The Working Group considered the consequential changes which may be required to implement CAP165.
- 4.9.2 The group discussed whether it would be appropriate for Users making a long term booking to have fixed charges. Fixing the locational charge will make the charge less accurate over time. This inaccuracy will be recovered through the residual. If both the locational and the residual are fixed the inaccuracy would need to be recovered through short term access and subsequent long-term bookings.
- 4.9.3 National Grid presented analysis to describe the quantitative effect of fixing the TNUoS charges. The results of this analysis can be found Annex 3 of the report. The group considered that fixing the whole TNUoS charge for the duration of the booking would leave National Grid with under or over recovery of the allowed revenue. This would still need to be recovered, and so could lead to additional charges that would be levied on all Users. Some Working Group members did not see why they should face the undue burden of the potentially unpredictable costs/risks associated with other Users fixing their charge with National Grid. The group considered that fixed charges would be

desirable only if they were fully fixed, and that would be impossible without changing the TO funding arrangements

- 4.9.4 CAP165 is not dependent on Users having the option to fix their charges. However, some User may believe that having the option to fix their charge would be favourable where they have made a long term commitment. It was noted by a member of the Working Group that Users could already, if they wished, seek to fix their charges by using a contracts for differences type agreement with either (i) another User or (ii) a financial institution etc. The arrangements for fixing TNUoS charges will be consulted upon separately through the charging governance.

## **4.10 Generation Zoning**

- 4.10.1 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. Transmission Access Working Group 3 considered generation zoning in detail, a summary of their discussions is included in this section.

- 4.10.2 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”)**

- 4.10.3 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.

- 4.10.4 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.

- 4.10.5 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.

4.10.6 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")**

4.10.7 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.

4.10.8 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*

4.10.9 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.

4.10.10 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.

4.10.11 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.<sup>2</sup>

### **Indicative generation zones**

4.10.12 At the fourth meeting of Working Group 3 on 16th June 2008, National Grid presented some indicative generation zones based on both the SZM

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

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.

- 4.10.13 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 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.
- 4.10.14 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 upgrading may be required to facilitate TEC sharing.

*Working Group 3 discussion*

- 4.10.15 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**

- 4.10.16 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.
- 4.10.17 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*

- 4.10.18 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.
- 4.10.19 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 limits on trades would allow larger zones with more nodes, and 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.
- 4.10.20 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*

- 4.10.21 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.
- 4.10.22 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.
- 4.10.23 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 4.11.11 below.

- 4.10.24 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.<sup>3</sup>
- 4.10.25 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.
- 4.10.26 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.
- 4.10.27 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**

- 4.10.28 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.
- 4.10.29 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 and even the possibility of nodal TEC exchange of transmission access.

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<sup>3</sup> [http://www.nationalgrid.com/NR/rdonlyres/1E709B88-B313-47B7-9835-2424C283798C/26845/GenerationZoning\\_final\\_meeting5.pdf](http://www.nationalgrid.com/NR/rdonlyres/1E709B88-B313-47B7-9835-2424C283798C/26845/GenerationZoning_final_meeting5.pdf)

- 4.10.30 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.
- 4.10.31 The second option was for a Locational Marginal Pricing (“LMP”) based approach for setting point-to-point rights. This bid-based approach can 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.
- 4.10.32 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.
- 4.10.33 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.
- 4.10.34 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.
- 4.10.35 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.
- 4.10.36 **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.
- 4.10.37 **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.

- 4.10.38 **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.

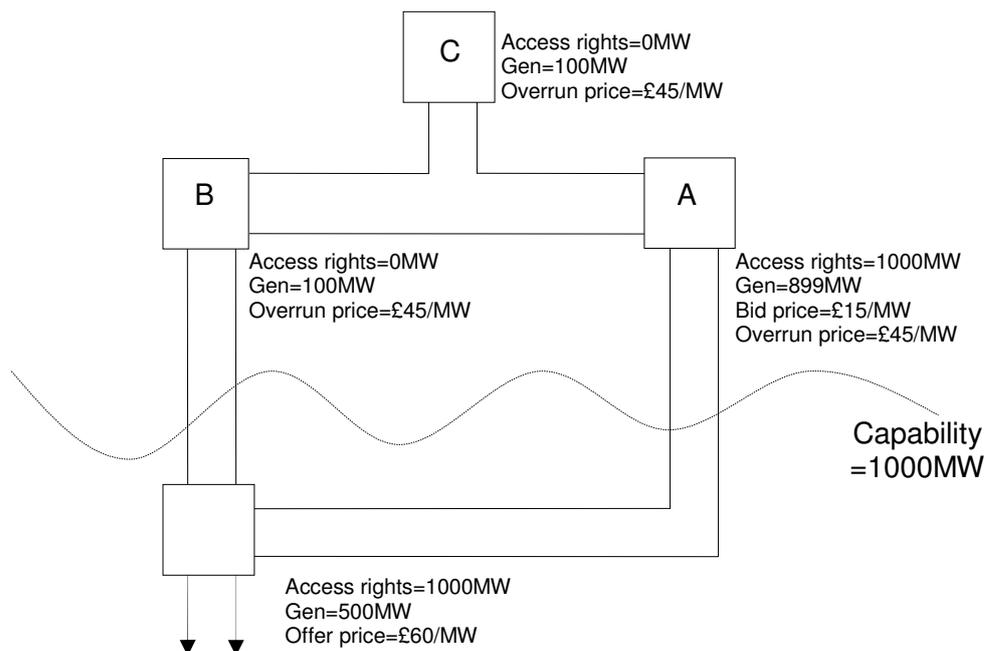
#### **Sharing access rights between nodes**

- 4.10.39 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 22<sup>nd</sup> 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**

- 4.10.40 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.
- 4.10.41 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
- 4.10.42 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.



4.10.43 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.

4.10.44 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.

4.10.45 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.

4.10.46 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 'end-date' 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:

$$\text{Exchange rate} = \frac{\text{Overrun price}_{\text{Node A}}}{\text{Overrun price}_{\text{Node B}}}$$

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

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

- 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

- 4.10.47 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.
- 4.10.48 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.
- 4.10.49 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.
- 4.10.50 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. The Working Group subsequently considered 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**

- 4.10.51 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.
- 4.10.52 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.
- 4.10.53 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**

- 4.10.54 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.
- 4.10.55 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.
- 4.10.56 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**

- 4.10.57 Prior to the eleventh meeting of Working Group 3 held on 24<sup>th</sup> September, National Grid circulated a report<sup>4</sup> 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 beyond the headroom was undertaken up to 2 times the headroom, the cost of constraints could potentially rise to £1.1 billion per annum for the upper range and a potential saving of about £0.2 billion per annum for the lower range. The £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.
- 4.10.58 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 (i) 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 (ii) 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**

- 4.10.59 The final Working Group 3 meeting was held on the 10<sup>th</sup> 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.

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

- 4.10.60 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.
- 4.10.61 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.
- 4.10.62 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.
- 4.10.63 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.
- 4.10.64 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.
- 4.10.65 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).

- 4.10.66 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.
- 4.10.67 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.
- 4.10.68 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.
- 4.10.69 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.
- 4.10.70 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**

- 4.10.71 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**

- 4.10.72 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.

- 4.10.73 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.

## 4.11 Arrangements for Local Connections

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

### Definition of Local Capacity Nomination

- 4.11.2 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

- 4.11.3 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

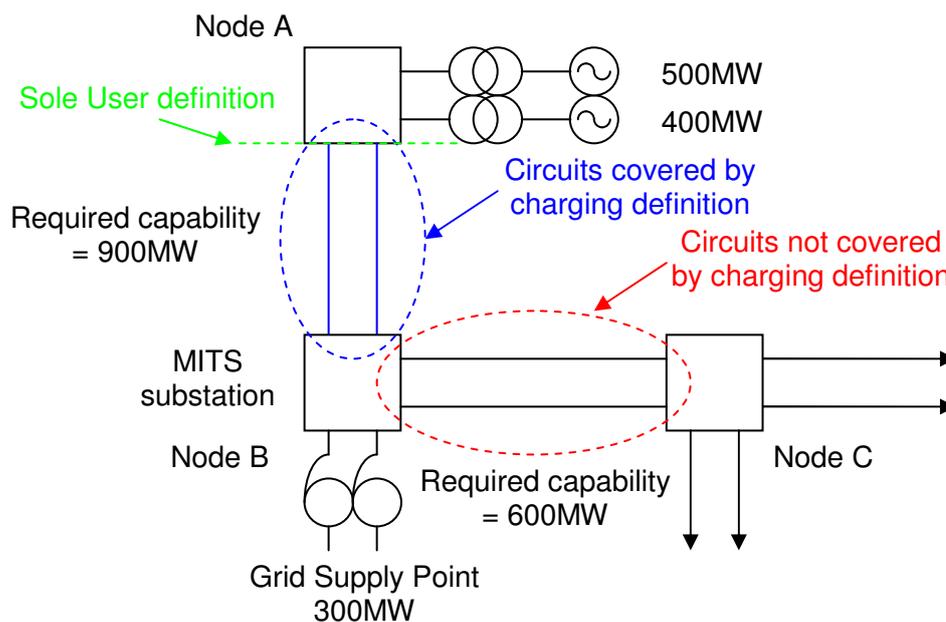
- 4.11.4 Working Group 3 debated as to whether LCN should be a finite right, linked (or not) to the period of firm transmission capacity obtained in an auction, or evergreen. Given that a generator may not wish to obtain long-term capacity through an auction process, it did not seem appropriate to link LCN to capacity obtained through the auction.

- 4.11.5 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.

- 4.11.6 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.
- 4.11.7 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



- 4.11.8 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.

- 4.11.9 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 at least 600MW.
- 4.11.10 As described in 4.10.22 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.
- 4.11.11 On 10<sup>th</sup> 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.
- 4.11.12 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.
- 4.11.13 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.
- 4.11.14 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.

Application processes

- 4.11.15 **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 generator's 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.
- 4.11.16 **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.
- 4.11.17 **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.
- 4.11.18 **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.
- 4.11.19 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.
- 4.11.20 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.

- 4.11.21 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:

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

- 4.11.22 If the 50% risk sharing, consistent with the CAP165 treatment for wider access is applied, the result is a multiplier of 8.
- 4.11.23 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.
- 4.11.24 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.
- 4.11.25 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.
- 4.11.26 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:

$$\text{Local Capacity Reduction Charge} = LCN_r \times LCAM_t$$

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  $t=-3$ ,  $LCAM = LTA \times 25\%$ .

$$\text{Local Termination Amount} = \text{Max} (0, (\text{LocGenTNUoS}_n \times X))$$

Where:

- $\text{LocGenTNUoS}_n$  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.
- 4.11.27 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.
- 4.11.28 **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.
- 4.11.29 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.
- 4.11.30 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,
- 4.11.31 **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. When discussing the possibility that LCN could be evergreen, the Working Group considered that this process could be applied to LCN. (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 23<sup>rd</sup> December in the previous (charging) year. The Working Group recommended an alignment of the notification timescales associated with TEC / LCN reduction with the TNUoS charge-setting process.

#### Transitional arrangements to LCN

- 4.11.32 Working Group 3 considered three options for transition from the current arrangements to those which require a Local Capacity Nomination.
- LCN based on a generator's CEC  
Given that CEC is not currently linked to transmission access allocation, this option seems the least appropriate.
  - LCN based on a generator's TEC  
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.
  - Generators would request its desired LCN in advance of a pre-defined date  
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 notification 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.

## **4.12 Consideration of Working Group Consultation Requests**

4.12.1 The Working Group received nine Consultation Requests. Each Consultation Request was reviewed by the Working Group. These Working Group Consultation Requests were developed by the Working Group into seven potential alternatives. These and the Working Group Alternatives included are summarised in the table in Annex 6. The full responses and Consultation Request forms can be found in volume two of this report.

### **Scottish and Southern Energy Consultation Request**

4.12.2 Under this consultation request new Users would be required to make a firm commitment to pay for four years fixed TNUoS charges. Users would then have an enduring right as long as TNUoS payments were maintained. A User would also be required to give a minimum of fifteen months notice to reduce TEC.

4.12.3 The group agreed the proposal could make a sensible alternative and put it forward to the Working Group vote as WGCR1. The majority of the Working Group believed WGCR1 was better than the baseline or the original so this proposal is included as one of the formal Working Group Alternative Amendments (WGAA4).

### **First Hydro Consultation Request**

4.12.4 First Hydro's Consultation request has pre-commissioning user commitment based on WGAA2 the key development is that the percentage of the liability which the User is required to secure reduces as the User approaches commissioning. This alternative takes into account the view that a generation project becomes less risky as it approaches commissioning. The post commissioning commitment is base on an 8 year rolling commitment.

4.12.5 The group agreed the proposal could make a sensible alternative and put it forward to the Working Group vote as WGCR2. Half the Working Group believed WGCR2 was better than the baseline or the original and the Chair agreed the proposal should be included as one of the formal Working Group Alternative Amendments (WGAA5).

### **Centrica Consultation Requests**

4.12.6 Centrica submitted two Consultation Requests the key feature of the requests was that the post-commissioning notice period was two years. The difference between the requests was in the pre-commissioning user commitment. One version was based on the WGAA1 pre-commissioning user commitment and the other was based on WGAA3 pre-commissioning user commitment.

- 4.12.7 Some members of the Working Group were concerned that the consultation request was similar to the CAP131 proposal which was rejected previously this year. Other members of the group supported the request and agree that two years gave users a more realistic timescale to provide closure signals.
- 4.12.8 The Working Group considered that it would be more appropriate to only keep one version of the request. The group reviewed the pre-commissioning arrangements for WGAA3 and considered that it was inappropriate to give users the choice between final sums and a generic commitment on an enduring basis. Giving Users the option to choose which type of commitment they choose undermines the assumption that the generic methodology will recover costs on average. The group considered that WGAA3 would give an improved share of risks if it was based on only the generic User commitment.
- 4.12.9 The group decided to vote on whether an alternative with WGAA3 style User commitment pre-commissioning and a two year notice period should be included in the final report. The proposal went forward to the Working Group vote as WGCR3. Half the Working Group believed WGCR3 was better than the baseline or the original and the Chair agreed the proposal should be included as one of the formal Working Group Alternative Amendments (WGAA6).

#### **Welsh Power's Consultation Requests**

- 4.12.10 Welsh Power's first request has three key components:
- At transition Users have the option to stay on their current final sums methodology.
  - No financial commitment should be given more than 3 years out from the trigger date
  - The cancellation amount can only be a maximum of 20% above National Grid's costs
- 4.12.11 The advantage of allowing Users to stay on their current user commitment methodology would save industry from having to refinance their commitment. The potential disadvantage is that any speculative projects in Scotland with no final sums due to the transition arrangements during BETTA would not be incentivised to reassess their projects.
- 4.12.12 Analysis was provided which showed the number of projects with no final sums was not significant. The group decided to allow Users to have the option to stay on their current user commitment methodology. The group agreed to apply this to all the Working Group Alternative Amendments.
- 4.12.13 One Working Group member suggested that providing user commitment more than three years before the trigger date could hold back small players from entering the market. Another member suggested that some works would be done more than three years ahead of the trigger date. Also asking for user commitment would ensure that speculative projects had some financial basis.
- 4.12.14 The group agreed that applying this proposal to WGAA1 and WGAA3 could make sensible alternatives and agreed to vote on whether they should be included in the final report. These proposals were included in the Working Group vote as WGCR4 and WGCR5. The majority of the Working Group did not believe WGCR4 was better than the baseline or

the original therefore the proposal is not included as one of the formal Working Group Alternative Amendments. The majority of the Working Group did believe WGCR5 was better than the baseline or the original therefore the proposal is included as one of the formal Working Group Alternative Amendments (WGAA7).

- 4.12.15 The group agreed that Welsh Power's suggestion to cap the amount of user commitment which could be recovered would lead to more of the risks being socialised by all Users. This was considered inappropriate.
- 4.12.16 The key principle of Welsh Power's second request is that the generator has the option of locking in their profile of charges. The group agreed that this feature would be advantageous and could be included in the current proposals so no alternative was required.
- 4.12.17 Welsh Power request 3 is based on WGAA3 but the pre commissioning user would also pay a one off, non-refundable booking fee. The group considered that any booking fee should be provided as a £/kW figure. One working group member suggested that the £1, £2, £3 profile was too high. The group considered that applying a limit to the number of years in advance users would be liable for the £/kW charge would stop this amount putting off smaller projects.
- 4.12.18 Welsh Power's request 4 is based on WGAA3, the key difference is that if the transmission infrastructure is delivered late the compensation should be given to the generator. The group agreed that having a fixed connection date would make a good alternative but there was not time to develop the appropriate compensation. The group considered that this could be developed through a later amendment.

#### **Fairwind (Orkney) Ltd's Consultation Request**

- 4.12.19 The group reviewed the consultation request and considered it was substantially different to the original and alternatives. After some discussion the group considered that an alternative based on WGAA3, where the security is based on a profiled percentage of the liability, would cover the concern raised regarding prohibitive securities.
- 4.12.20 The group agreed the proposal could make a sensible alternative and put it forward to the Working Group vote as WGCR6. The majority of the Working Group did not believe WGCR6 was better than the baseline or the original so this proposal is not included as one of the formal Working Group Alternative Amendments.

## **5.0 WORKING GROUP ALTERNATIVE AMENDMENTS**

- 5.1 As a result of their discussions, Working Group members decided to put forward seven Working Group Alternative Amendments.

### **Working Group Alternative Amendment 1 (WGAA1)**

- 5.2 WGAA1 was proposed by National Grid, and represents a change to the original, in that access rights would be defined on a nodal, rather than zonal, basis. It was adopted by the Working Group as a formal Working Group Alternative as a majority of Working Group members believed it to better facilitate the CUSC objectives when compared with the original amendment.
- 5.3 This alternative has been proposed based on the findings of Working Group three. As noted in Working Group 3's discussion, zones to allow for sharing would be impractically small and large zones would cause high costs. This analysis leads to the conclusion that nodally defined access rights would be appropriate for CAP165.
- 5.4 All pre-commissioning security arrangements and liabilities would remain the same as in the original amendment except that a user will need to apply for access at a node rather than access to a zone. The cancellation amount and user commitment amounts would still be based on the zonal TNUoS charge, with this zonal TNUoS Charge being fixed at the prevailing TNUoS tariff at the last date at which a Construction Agreement could be signed.
- 5.5 Post Commissioning Securities would be set at zero, effectively a roll forward of the existing post-commissioning financial security arrangements. Liabilities would remain as per the original as the remainder of the finite rights booking.
- 5.6 Should CAP165 or any of its Working Group Alternative Amendments ultimately be approved by the Authority then Users who have entered into a Construction Agreement prior to such amendments to the CUSC being implemented will be given the option to retain their existing "pre-CAP165" security arrangements.
- 5.7 The original amendment anticipated users being able to share TEC on a 1:1 zonal basis this would not work under the nodal alternative for CAP165. Options for introducing sharing under nodal arrangements have been considered in CAP163.

### **Working Group Alternative Amendment 2 (WGAA2)**

- 5.8 Working Group Alternative Amendment 2 (WGAA2) was proposed by a Working Group member. The principle difference between WGAA2 and WGAA1 is in the User commitment associated with pre-commissioning generators. Working Group Alternative 2 was approved as a Working Group Alternative by the Chair of the Working Group.
- 5.9 In WGAA2, pre-commissioning generators would be required to secure "Pre-Commissioning Liabilities" (PCLs). PCLs would be estimated by National Grid to cover all of the costs of local and wider transmission access works required and known at the time of the connection offer. The PCL would form part of the offer and would remain a fixed profile until such time as the User completes and connects to the system, or modifies its agreement, at which time National Grid may revise the PCLs.

- 5.10 If a party terminates prior to completion, the liabilities would become due. If the stranded costs are less than the PCL, the User would be refunded the difference. If the costs were greater than the PCL, there would be no additional liabilities due to the User.
- 5.11 By entering a BCA, or BEGA (where the generator was greater than 100MW), a party would pre-qualify to reserve long term entry access rights, and the period of the booking would need to be confirmed before the commencement of any transmission works. There would be a pre-defined minimum booking period of 8 years, consistent with the CAP165 original proposal with a liability for these charges associated with the long-term transmission rights booking being triggered at completion. Security for post-commissioning Users would be based on the balance of the current years' charges, as in the original CAP165 amendment and WGAA1.
- 5.12 The proposed PCL regime differs from the existing final sums arrangements in two ways. Firstly, it would be codified in the CUSC, and secondly, the PCLs would be fixed at the time of the offer. It should be noted that the fixed PCL would therefore carry an under-recovery risk for National Grid, which would require management. (This would arise in the event that a User terminates prior to connection, and the PCL is not sufficient to recover the stranded costs. This will depend on how many of the assets purchased can be reused. There would be no offsetting of over-recoveries, as where any PCLs were greater than stranded costs then this would be result in the difference being refunded to the terminating User.)
- 5.13 Post Commissioning Securities would be set at zero, effectively a roll forward of the existing post-commissioning financial security arrangements. Liabilities would remain as per the original as the remainder of the finite rights booking.
- 5.14 Should CAP165 or any of its Working Group Alternative Amendments ultimately be approved by the Authority then Users who have entered into a Construction Agreement prior to such amendments to the CUSC being implemented will be given the option to retain their existing "pre-CAP165" security arrangements.

### **Working Group Alternative Amendment 3 (WGAA3)**

- 5.15 Working Group Alternative Amendment 3 (WGAA3) was proposed by a Working Group member. WGAA3 differs from WGAA1 in its treatment of both the pre- and post-commissioning User commitment. It was adopted by the Working Group as a formal Working Group Alternative as a majority of Working Group members believed it to better facilitate the CUSC objectives when compared with the original amendment.
- 5.16 Pre-commissioning User commitment is similar to that under WGAA1. The Trigger Date and Completion Date will be determined as in the CAP165 original amendment
- 5.17 Prior to the Trigger Date, the User would be liable for User Commitment Charges based upon User Commitment Amounts, which would be calculated using a generic methodology based on a value of £1/kW commencing upon signature of the Construction Agreement. This would increase by £1/kW following each full year up to the Trigger Date, subject to a cap of £3/kW. For

the avoidance of doubt, positive User Commitment Amounts will be payable regardless of whether the User is in a positive or a negative charging zone.

- 5.18 Post Trigger Date but before the Completion Date Users will be liable for Cancellation Charges based upon Cancellation amounts should they terminate their agreements. These Cancellation Charges will be based upon Cancellation Amounts equal to the greater of (i) TNUoS multiplied by eight years, and (ii) zero.
- 5.19 The liability shall remain fixed until the user connects, or modifies the agreement. The liability would be payable on a fixed profile over the four years prior to connection, using a 25%/50%/75%/100% profile as in the CAP165 original. It should also be noted that in the event that a User is in a negative TNUoS Charging zone it shall continue to be liable to pay a Cancellation Amount equal to £3/kW in each year between the Trigger Date and Completion Date.
- 5.20 The pre-commissioning liability (regardless of the option chosen) would be non-refundable should the User cancel the agreement prior to connection. This means that the amount committed by the User would remain with the TO and that the assets would remain the property of the TO (and can be reused as the TO wishes), with no refund given to the User, even if the assets are re-used. In the view of the proposer of WGAA3, the non-refundable nature of the pre-commissioning liability would be a quid pro quo for the User's ability to use the TNUoS multiplied by eight years methodology (which may over or under-recover the stranded asset costs in individual cases, but would on average recover sufficient amounts).
- 5.21 Should CAP165 or any of its Working Group Alternative Amendments ultimately be approved by the Authority then Users who have entered into a Construction Agreement prior to such amendments to the CUSC being implemented will be given the option to retain their existing "pre-CAP165" security arrangements.
- 5.22 Under WGAA3, post-commissioning User commitment would be given by a liability to pay TNUoS for a Commitment Period. In the view of the proposer of WGAA3, the length of the Commitment Period should:
- Allow generators to respond to market conditions; and
  - Provide National Grid with adequate closure signals.
- Post Commissioning Securities would be set at zero, effectively a roll forward of the existing post-commissioning financial security arrangements.
- 5.23 WGAA3 has a four year Commitment Period, based upon:
- National Grid analysis suggesting an average (mean) six year period from signing a connection agreement to commissioning
  - UK power market tends to have 2-3 year liquidity
    - However, when hedging large plant this is closer to 2 years due to lower liquidity in later years
  - The effect of new legislation needs to be taken into account
    - Creation of new legislation tends to be a lengthy process
    - However, the detailed effects of new legislation tend to be known later in the process
  - The four year commitment period provides a three year notice period
    - CAP131 analysis suggests that up to on average 12.5% of transmission investment occurs >3.5 years prior to commissioning

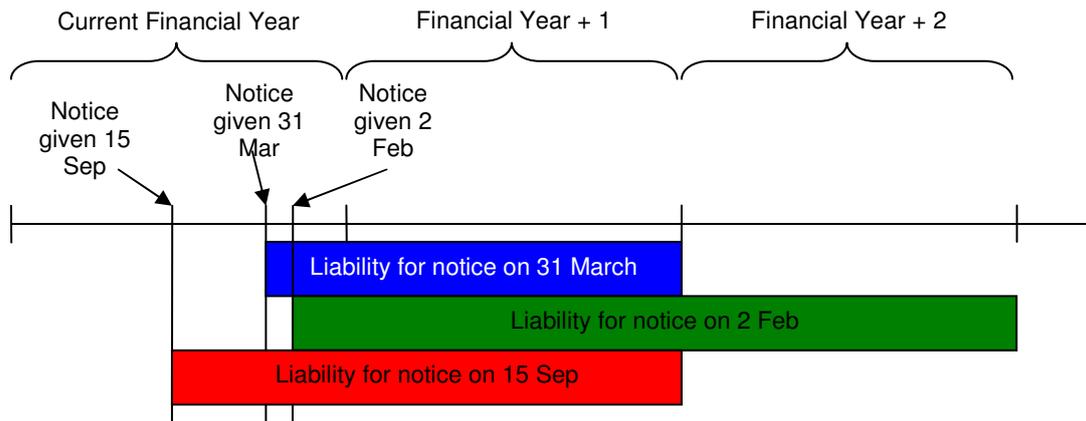
- Therefore, the proposal could avoid up to 87.5% of unrequired pre-commissioning investment
  - The Commitment Period should be based upon whole financial years (i.e. April – March)
- 5.24 In the view of the proposer of WGAA3, this is a compromise solution that shares the risk between generators and National Grid.
- 5.25 All current and newly commissioned generators would follow the same process, although:
- Existing generators at the time of approval would follow the “Transition Period Process”
  - New generators would have to commit to the system for a minimum period of four years
- 5.26 By the 31 March (or prior working day if this falls on a non-working day each year, each generator would have to decide whether to:
- (a) Remain on the system for another 4 years
    - No action would be required by the generator
    - National Grid would receive TNUoS for the generator for at least the following four years
    - National Grid would have a signal that further investment is viable in the applicable area; or
  - (b) Decide to leave the system after the next three years
    - The generator would submit a “Commitment Notice”
    - National Grid would receive TNUoS from the generator each year for the next three years only
    - The generator would leave the system at the end of the three years. For clarity, an example would be:
      - Generator submits a Commitment Notice on 31 March 2009
      - Generator does not have the option to remain on the system beyond the third year of the notice period, unless they successfully reapply for capacity
    - At the end of the Notice period, the generator would relinquish their wider transmission access rights and would have to reapply (just as a new User would) for wider transmission access rights in the future.
- 5.27 A generator could choose to relinquish their long term wider transmission access rights early at any time. However, the generator would have to pay National Grid the greater of:
- (a) Any outstanding commitment for the current year, plus either:
    - If no Commitment Notice has been received, the relevant commitment for the next three years
    - If a Commitment Notice has been received, the relevant commitment for the remainder of the notice period; or
  - (b) Zero
- 5.28 A generator relinquishing their wider transmission access rights would have to reapply for a connection if they wish to obtain such rights in the future.
- They can only rejoin if there is capacity available
  - All Users wishing to obtain wider transmission access rights will have equal priority (as between new Users and previous Users)

- A returning User must specify how many years they wish to obtain wider transmission access rights for, this being either:
    - (a) A four year Commitment Period: if available, the User receives the wider transmission access rights and enters the rolling notice period regime; or
    - (b) A one, two or three year Commitment Period: if available, the User commits to paying TNUoS each year, relinquishing their wider transmission access rights at the end of the requested Commitment Period (access rights would be relinquished, and the generator would have to again reapply for a connection if they wished to have wider transmission access rights)
- 5.29 During the transition period, existing generators would have to specify how many years they wished to remain on the system, either:
- A four year Commitment Period: the User would enter the rolling notice period regime; or
  - A one, two or three year Commitment Period: the User would commit to paying TNUoS each year, relinquishing their wider transmission access rights at the end of the requested Commitment Period (transmission access rights would be relinquished, and the generator would have to again reapply for a connection if they wished to reconnect to the system)
- 5.30 In the view of the proposer of WGAA3, WGAA3 would provide benefits to National Grid, in that it would provide greater signals for plant closure (capacity release), therefore providing efficient investment signals for the network; would provide certainty of receiving the relevant commitment for the Commitment Period; and would facilitate a consistent definition of TEC property rights in the CUSC. For Generators, it would facilitate certainty for generators' investment plans; provide the ability to respond to the market, aligning access rights with the "liquid" market; and would keep the risk / cost of closure (due to market conditions or legislation) at a reasonable level.
- 5.31 Overall, the proposer considers that it would provide certainty of transmission access for all types of generator; potentially help new investment as flexibility is guaranteed; spread risk between generators and National Grid; give minimal disruption to the industry (as it fits with the current framework); and could be implemented in conjunction with short-term transmission access modifications (CAPs 161, 162 and 163).

#### **Working Group Alternative Amendment 4 (WGAA4)**

- 5.32 Working Group Alternative 4 was proposed by a respondent to the Working Group Consultation. It was adopted by the Working Group as a formal Working Group Alternative as a majority of Working Group members believed it to better facilitate the CUSC objectives when compared with the original amendment. Working Group Alternative 4 is based substantially on Working Group Alternative 3 with the exception that existing Users would be required to give 15 months notice that they wish to relinquish their long term access rights rather than the 4 years notice contained within WGAA3. Existing Users would not go through the "Transition Process" described in 5.29 above, but rather they would immediately move to a rolling 15-month rolling notice period.
- 5.33 New users would still be required to commit to a minimum 4 year booking as in WGAA3.

- 5.34 The pre-commissioning security and liability arrangements for WGAA4 would be the same as in WGAA3. Post Commissioning security would likewise be zero, and the liability for a post-commissioning generator would be set at the remainder of its 15-month notice period should it terminate. It is noted that due to the annual nature of the transmission access product, Users would need to give notice before 1<sup>st</sup> January in a given financial year to prevent further exposure to TNUoS charges for the remainder of the current financial year and the next two financial years and instead restrict it to only the remainder of the current financial year and the next following financial year. This is shown diagrammatically below:



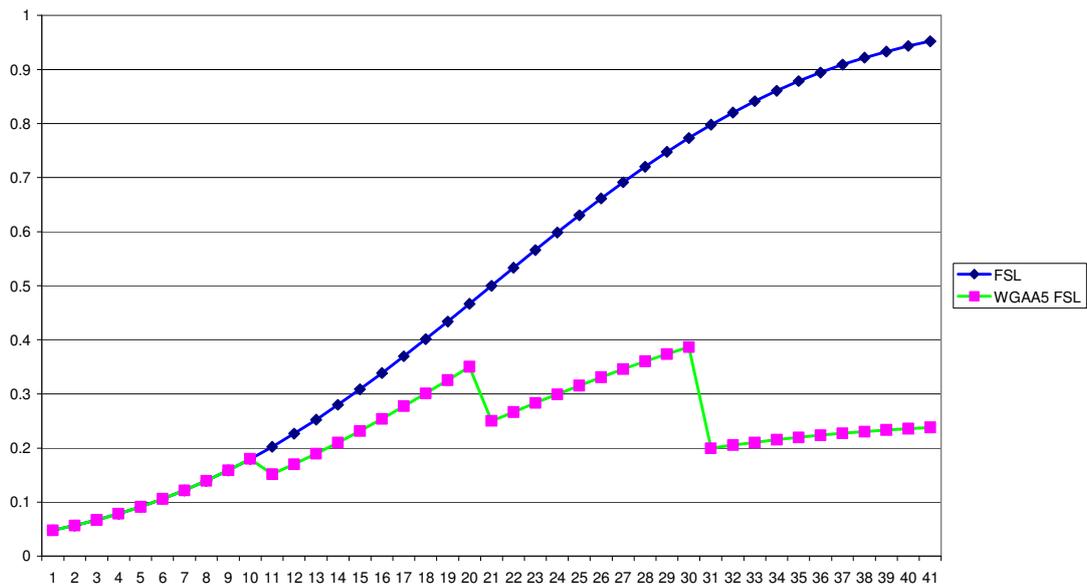
#### Working Group Alternative Amendment 5 (WGAA5)

- 5.35 Working Group Alternative 5 was proposed by a respondent to the Working Group Consultation and later approved as Working Group Alternative 5 by the Chair of the Working Group.
- 5.36 The access rights granted under WGAA5 are based upon a similar premise to that put forward in WGAA3 with the exception that the rights would be on an 8-year rolling basis and not a 4-year basis as in WGAA3.
- 5.37 Pre-commissioning securities for Users would be set according to the Cost Reflective Fixed Final Sums methodology contained within WGAA2. However to reflect the perceived lower risk of generators defaulting close to their Completion Dates these would be scaled according to the following factors assuming a Completion Date of "T":

*For termination at T-4: 100%*  
*For termination at T-3: 75%*  
*For termination at T-2: 50%*  
*For termination at T-1: 25%*

Diagrammatically this is as follows:

Sample Final Sums Liability under WGAA5



5.38 Post Commissioning Securities and Liabilities would be identical to WGAA3.

#### Working Group Alternative Amendment 6 (WGAA6)

5.39 Working Group Alternative 6 was proposed by a respondent to the Working Group Consultation. It was adopted by the Working Group as a formal Working Group Alternative as a majority of Working Group members believed it to better facilitate the CUSC objectives when compared with the original amendment.

5.40 WGAA6 is essentially identical to WGAA3 with the exception that a 2 year notice period would be required of Users to reduce their transmission access rights. This would also mean that through the Transition Process described in WGAA3, in WGAA6 transiting users would be required to nominate either a 1 or 2 year period prior to the amendment being implemented and those that nominate a two year period will move to a rolling 2 year access right. Those that nominate a single year will have to relinquish their long-term rights at the end of that year.

#### Working Group Alternative Amendment 7 (WGAA7)

5.41 Working Group Alternative 7 was proposed by a respondent to the Working Group Consultation. It was adopted by the Working Group as a formal Working Group Alternative as a majority of Working Group members believed it to better facilitate the CUSC objectives when compared with the original amendment.

5.42 Working Group Alternative 7 is based substantially around WGAA3 and differs in only one material respect. This is in the pre-commissioning securities and liabilities that a User is expected to post / incur. In WGAA3 the Pre-Trigger Date securities and liabilities are equal and are set at £1/kW in the year that the User's Construction Agreement is signed, ramping to £2/kW in the following year before moving to £3/kW in the following year and remaining at £3/kW in every successive year until the Trigger date is reached whereby this amount moves to the Cancellation Amount (except in negative charging zones where it remains at £3/kW).

- 5.43 WGAA7 proposes that this structure is retained with the caveat that no liabilities or equal securities are incurred until the point 7 years prior to the completion date in a construction agreement.

## **6.0 ASSESSMENT AGAINST APPLICABLE CUSC OBJECTIVES**

### **Original Amendment**

- 6.1 The Working Group considered the CAP165 original amendment against the applicable CUSC Objectives:
- (a) the efficient discharge by the Licensee of the obligations imposed upon it by the act and the Transmission Licence; and
  - (b) facilitating effective competition in generation and supply of electricity and facilitating such competition in the sale, distribution and purchase of electricity.
- 6.2 Some Working Group members believed that the original amendment would better facilitate the achievement of applicable CUSC objective (a) in that the more efficient transmission investment signals that would result, and the consequentially reduced risk of stranding transmission assets, would better allow National Grid as the licensee to discharge its obligation under the Act to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.
- 6.3 Such Working Group members also believed that the original amendment would better facilitate the achievement of applicable CUSC objective (b) as:
- Pre- and post-commissioning generators would be required to provide equivalent levels of user commitment liabilities, thereby ensuring the equitable treatment of the two groups;
  - Existing capacity could be reallocated with certainty to new entrants as a result of the firm bookings made by existing post-commissioning generators; and
  - The enhanced transparency in the commercial frameworks of required user commitments and increased certainty would address the perceived barriers to entry, thereby providing more confidence in the firmness of capacity applications, and increasing competition.
- 6.4 The majority of Working Group members believed that the original demotes applicable CUSC objective (a) as introducing finite rights does not provide an appropriate balance of risk between National Grid and generation. These members also believed Users may feel the need to make a commitment in line with generating plant lifetimes and with no option to extend their access period this could be of significant duration with no price certainty for the User.
- 6.5 Such Working Group members also believed that the original amendment would frustrate the achievement of applicable CUSC objective (b) as the amendment reduces the flexibility of generation to respond to system needs which could lead to an overall less efficient generation system. In particular it is difficult for generation to invest in life extensions for existing connections

which may actually be more efficient for carbon and Security of Supply than transfer of capacity to a new party and new build project.

- 6.6 The majority of the Working Group did not consider that the introduction of zones would better facilitate the CUSC objectives as this could lead to significant constraint costs.

### **Working Group Alternative Amendment 1**

- 6.7 The Working Group considered WGAA1 against the applicable CUSC Objectives:

- (a) the efficient discharge by the Licensee of the obligations imposed upon it by the act and the Transmission Licence; and
- (b) facilitating effective competition in generation and supply of electricity and facilitating such competition in the sale, distribution and purchase of electricity.

- 6.8 Some Working Group members believed that WGAA1 would better facilitate the achievement of applicable CUSC objective (a) in that the more efficient transmission investment signals that would result, and the consequentially reduced risk of stranding transmission assets, would better allow National Grid as the licensee to discharge its obligation under the Act to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

- 6.9 Such Working Group members also believed that WGAA1 would better facilitate the achievement of applicable CUSC objective (b) as:

- Pre- and post-commissioning generators would be required to provide equivalent levels of user commitment liabilities, thereby ensuring the equitable treatment of the two groups;
- Existing capacity could be reallocated with certainty to new entrants as a result of the firm bookings made by existing post-commissioning generators; and
- The enhanced transparency in the commercial frameworks of required user commitments and increased certainty would address the perceived barriers to entry, thereby providing more confidence in the firmness of capacity applications, and increasing competition.

- 6.10 The majority of Working Group members believed that WGAA1 would better facilitate applicable CUSC objective (a) than the original amendment, in that the release of zonal access rights, as proposed under the original amendment, could lead to very significant constraint costs, and this would not be consistent with National Grid's obligation to maintain an efficient and economic transmission system.

- 6.11 Some Working Group members believed that WGAA1 demotes applicable CUSC objective (a) as introducing finite rights does not provide an appropriate balance of risk between National Grid and generation. These members also believed Users may feel the need to make a commitment in line with generating plant lifetimes and with no option to extend their access period this could be of significant duration with no price certainty for the User.

- 6.12 Such Working Group members also believed that WGAA1 would frustrate the achievement of applicable CUSC objective (b) as the amendment reduces the flexibility of generation to respond to system needs which could lead to an overall less efficient generation system. In particular it is difficult for generation to invest in life extensions for existing connections which may actually be more efficient for carbon and Security of Supply than transfer of capacity to a new party and new build project.

#### **Working Group Alternative Amendment 2**

- 6.13 The primary difference between WGAA2 and WGAA1 is the treatment of pre-commissioning User commitment, with WGAA2 featuring a system of fixed cost reflective final sums. Some Working Group members therefore believed that WGAA2 would better facilitate applicable CUSC objective (a) than WGAA1, as the cost reflective nature of the final sums would be more economic. However, other Working Group members believed that it would less well facilitate objective (b), in that pre-commissioning user commitment would be less certain, and would not be equivalent to the user commitment provided by post-commissioning generators. These Working Group members noted that very large security amounts may be required as a party's new connection may be influencing a large number of existing transmission investment projects, and that Users would have no control over, of visibility of, these.
- 6.14 Aside from the above differences, the assessment against the applicable CUSC objectives for WGAA2 would be as for WGAA1.

#### **Working Group Alternative Amendment 3**

- 6.15 The principle feature of WGAA3 is its four year rolling commitment period for post-commissioning Users. Some Working Group members believed that this would better facilitate applicable CUSC objective (a) by providing clear notice of plant closures to National Grid, enabling system design and planning, and, furthermore, that this alternative would ensure that the notice would be given in timescales which align with investment lead times, thereby improving efficiency of system design. They considered this would provide a better balance of risk between generators and TOs than the current baseline. Other Working Group members, while agreeing that WGAA3 would better facilitate applicable objective (a) than the current baseline, believed that the four year rolling commitment period would not provide as much information as the open ended commitment period featured in the original amendment, WGAA1 and WGAA2, and that WGAA3 would therefore not facilitate applicable objective (a) as well as these alternatives.

#### **Working Group Alternative Amendment 4**

- 6.16 Working Group Alternative Amendment 4 is essentially the same as Working Group Amendment 3 albeit with a 15 month rolling notice period rather than a 4-year rolling notice period for existing Users. Some Working Group members believed that this Alternative would better facilitate applicable objective (b) as it would enhance investor confidence in the GB Electricity market by not removing existing generators access rights and that it would also better facilitate applicable objective (a) by enhancing security of supply by again not rescinding existing access rights.
- 6.17 Another Working Group member viewed WGAA4 as better facilitating applicable objective (a) in the same manner as WGAA3, but that the benefits

were further weakened when compared with the amendments with finite rights due to the even further reduced notice period.

#### **Working Group Alternative 5**

- 6.18 WGAA5 being based substantially upon WGAA3 has been assessed as having the same benefits as that amendment. The assessment of the securities and liabilities that WGAA5 uses from WGAA2 also hold true with the exception that some Working Group members felt that the scaling of these securities and liabilities according to the perceived reduced risk offered to National Grid by projects nearing their Completion Date further enhanced WGAA5's assessment against applicable objective (b).
- 6.19 Other Working Group members felt that the scaling of Final Sums Liabilities in this manner was not warranted as the risk profile did not in their view match that proposed and as such there was a materially higher risk that projects terminating prior to their completion dates would not be providing sufficient securities to match the expenditure incurred by the TOs in constructing that User's connection and as such the amendment did not better facilitate applicable objective (a) as well as certain other alternatives or the original amendment.

#### **Working Group Alternative Amendment 6**

- 6.20 WGAA6 essentially sits part way between WGAA3 and WGAA4 when it is assessed against the applicable CUSC objectives. That is to say Working Group Members felt that it did better facilitate when assessed against both applicable objectives (a) and (b) although some Working Group members felt that it was not as good as WGAA4 (those that felt that giving greater flexibility to existing holders of long-term transmission access was most beneficial) whereas other Working Group Members believed WGAA3 to be better (those that felt that a longer notice period was preferable to give a clearer signal of the rescission of long-term rights to National Grid).

#### **Working Group Alternative Amendment 7**

- 6.21 The assessment against the applicable CUSC objectives for WGAA7 again essentially follows the same arguments as WGAA3, with some Working Group Members believing that capping User Commitment amounts at zero more than seven years ahead of a given Completion Date better facilitated Applicable Objective (b) when compared with WGAA3 as it would provide less of a barrier to entry for new connectees. Another member of the Working Group felt that as TOs may be incurring costs more than 7 years ahead of a specified completion date it was appropriate to maintain a User Commitment signal more than 7 years from a User's Completion Date and that as a result WGAA7 did not better facilitate applicable objective (a) when compared with WGAA3.

## 7.0 IMPACT ON IS SYSTEMS

7.1 The conclusions of National Grid's initial IS impact assessment for the Original Amendment and the Working Group Alternative Amendments are summarised below. These conclusions are indicative only and are subject to change following further analysis.

7.2 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.

7.3 For CAP165 it is anticipated that changes will be required to the transport model/DCLF and to the TNUoS charge calculation system. The impact of these changes is expected to be the same for the Original, WGAA1, WGAA2, WGAA3, WGAA4, WGAA5, WGAA6 and WGAA7.

	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	Sep-09	Nov-09	2	11	NO	YES	•		
WGAA1	Sep-09	Nov-09	2	11	NO	YES	•		
WGAA2	Sep-09	Nov-09	2	11	NO	YES	•		
WGAA3	Sep-09	Nov-09	2	11	NO	YES	•		
WGAA4	Sep-09	Nov-09	2	11	NO	YES	•		
WGAA5	Sep-09	Nov-09	2	11	NO	YES	•		
WGAA6	Sep-09	Nov-09	2	11	NO	YES	•		
WGAA7	Sep-09	Nov-09	2	11	NO	YES	•		

7.4 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. It can be assumed that this will increase time and cost.
5. National Grid has not assessed the work against its existing IS workload to assess resource availability.

7.5 A more accurate IS impact assessment for the Original Amendment and the Working Group Alternative Amendments 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 Amendments 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.

Without prejudicing the decision of the Authority, National Grid IS 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.

## **8.0 IMPLEMENTATION AND TRANSITION**

### **8.1 Assumptions:**

1. Local charging GB ECM 11 is implemented in April 2009, or if vetoed other local charging arrangements are implemented prior to CAP165 Original or any WGAA implementation.
2. Delivery of IS changes to the transport model/DCLF and to the TNUoS charge calculation system can be implemented only by November 2009.

8.2 The Working Group proposes CAP165 should be implemented on 1st April 2010, subject to receiving an Authority decision by the end of September 2009, and IS changes proceeding as discussed below. If these dates are not met, or a decision or notification to start works in advance of a decision is not received, the implementation date will be delayed by the same length of time.

8.3 If National Grid IS work does not proceed as discussed in section 8 the implementation date would need to be delayed beyond April 2010.

### **Mid-Year Implementation:**

8.4 The CAP165 proposed implementation dates are all tied to 1<sup>st</sup> April in a given year to align with the other Transmission Access amendments that are being progressed alongside CAP165. CAP165 in isolation could however be implemented mid-year as the original and all of the Working Group Alternative Amendments retain TNUoS tariffs as the basis of the transmission charging arrangements. Therefore a mid-year implementation would see the transmission charges in that year remain the same pre- and post- any implementation of CAP165.

8.5 The security arrangements for individual pre-commissioning Users may change (although the option for existing Users to retain pre-CAP165 securities is allowed which may mitigate the impact in this area) through CAP165. These Users receive six-monthly revised updates of security requirements in April and October of each year and so an implementation date aligned to the 1<sup>st</sup> October or 1<sup>st</sup> April in each year would see the workload connected with revising securities minimised.

### **Transition to new TEC and LCN values**

- 8.6 Implementation of any of the original or alternative amendments will require changes to the Bilateral Agreements and the Construction Agreements. The main change is associated with implementing LCN and the revised TEC arrangements in existing Bilateral Agreements and Construction Agreements for generators under construction. 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.
- 8.7 Working Groups 1, 2 and 3 discussed the transition and enduring arrangements for LCN. It was considered 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.

### **Transition Process for CAP165 Original, WGAA1 and WGAA2**

- 8.8 The envisaged transitional process for LCN and TEC for CAP165 original amendment, WGAA1 and WGAA2 is as follows:
- 8.9 All existing users will have the following values for LCN and TEC inserted into their existing Agreements as default values in the event that the User does not contact National Grid with variations to the default parameters within 1 month of the date of implementation for CAP165:
- For LCN the LCN MW level will be equal to the existing TEC MW level within the Users Bilateral Agreement effective on the date of any Authority approval of CAP165 (the "CAP165 Decision Date"). The LCN effective date will be equal to the existing TEC effective date contained within the User's Bilateral Agreement effective on the CAP165 Decision Date. The TEC level and TEC Effective date will remain unchanged by any implementation of CAP165.
  - In terms of the TEC booking period all Users (both pre- and post-commissioning) will default to a TEC booking period of 8 full financial years from the CAP165 implementation date (which will be more than 8 calendar years should the CAP165 implementation date not be on the 1<sup>st</sup> April in any year).
- 8.10 Should a User wish to vary the terms of its new Bilateral Agreement from the above default values then it shall adopt one of two options.

#### **Option 1: Variations by Notification**

- 8.11 Both pre- and post- commissioning generators may apply to extend their TEC booking period from the default and must notify National that they intend to do so within 1 month of the CAP165 Decision Date.
- 8.12 Post-Commissioning generators may also apply to reduce their TEC booking period from the default 8 years again by notifying National Grid that they wish to do so within 1 month of the CAP165 Decision Date.

#### **Option 2: Variations via Modification Application**

- 8.13 Pre-Commissioning Users who wish to advance their LCN or TEC Effective Dates to a date before their existing TEC Effective Date within their signed

Bilateral Agreement at the CAP165 Decision Date shall apply to do so via a Modification Application. National Grid shall make a Modification Offer to such User in response to such Application in accordance with the existing CUSC rules. In the event that the Modification Offer that results has not been signed prior to the CAP165 Implementation Date the Users Bilateral Agreement will reflect the default TEC and LCN variables (subject to any notified changes under option 1) from the CAP165 Implementation Date until and if such Modification Offer is signed.

- 8.14 Pre- and Post-Commissioning Users may apply to increase their LCN MW level from the default value or to increase their TEC MW value and again this must be done via Modification Application. National Grid shall make a Modification Offer to such User in response to such Application in accordance with the existing CUSC rules. In the event that the Modification Offer that results has not been signed prior to the CAP165 Implementation Date the Users Bilateral Agreement will reflect the default TEC and LCN variables (subject to any notified changes under option 1) from the CAP165 Implementation Date until and if such Modification Offer is signed.

#### **Transition Process for WGAA3, WGAA4, WGAA5, WGAA6 and WGAA7**

- 8.15 WGAA3, WGAA4, WGAA5, WGAA6 and WGAA7 differ from the CAP165 original, WGAA1 and WGAA2 as they do not enshrine within them the concept of a finite temporally defined access right, but rather the concept of an enduring right with associated notice period.
- 8.16 The transitional processes for these Working Group Alternatives differ slightly than those detailed above for the CAP165 Original, WGAA1 and WGAA2 in one key respect namely that there is no need for a default finite access period or therefore any arrangements to allow Users to amend this.
- 8.17 One caveat to this is that if a User wishes to give notice of a TEC reduction then the relevant User will need to notify National Grid within one month of any CAP165 Decision Date. During the transition period *only* existing Users may give notice periods less than the absolute requirements of the particular notice period codified within the CUSC, provided they are still in an integer number of years. For instance in WGAA3 which has a codified notice period of 4 years a transiting existing User may give either 1, 2, 3 or 4 years notice that it wishes to rescind its long term entry capacity rights.
- 8.18 In all other respects including the alignment of LCN MW values to existing TEC MW values and the arrangements to amend such values via Modification Application if required, the transition amendments noted above for the CAP165 Original Amendment, WGAA1 and WGAA2 also apply to WGAA3, WGAA4, WGAA5, WGAA6 and WGAA7.

#### **Transition of Securities**

- 8.19 As part of the CAP165 arrangements Users who have a signed Bilateral Agreement on the CAP165 Decision Date may make a decision to stay on their existing security arrangements or to change to the security arrangements introduced by CAP165. This ability applies across all the variants under CAP165, i.e. the original amendment and each of the Working Group Alternative Amendments.
- 8.20 The default arrangement will be that an existing User retains its existing securities unless it notifies National Grid that it intends to switch to the

CAP165 security arrangements. Should an existing User wish to transfer to the CAP165 security arrangements then it must notify National Grid that it wishes to do so within 1 month of the CAP165 Decision Date. National Grid will then inform the User of its revised security requirement 75 days prior to the date on which CAP165 is implemented.

- 8.21 The User must then ensure that it has these securities in place at least 45 days prior to the date on which CAP165 is implemented. National Grid shall refund the securities held under the arrangements in force immediately prior to any implementation of CAP165 as soon as reasonably practicable following the CAP165 implementation date.

## **9.0 IMPACT ON THE CUSC**

- 9.1 The impact on the CUSC if CAP165 or any of its alternatives were implemented would include, but not be limited to, changes to Sections 2 (Connection), 3 (Use of System), 6 (General Provisions) and 9 (Interconnectors). There would also be consequential changes required to Section 11 (Interpretation and Definitions), and potentially to the CUSC Schedules and Exhibits.

## **10.0 IMPACT ON INDUSTRY DOCUMENTS**

### **Impact on Core Industry Documents**

- 10.1 No impact on Core Industry Documentation has been identified if CAP165 or any of its alternatives are implemented, but the Working Group requests views on this issue.

### **Impact on other Industry Documents**

- 10.2 Related modifications to the Use of System Charging Methodology have been proposed to cost reflectively charge local infrastructure and to remove the residual element of the entry (generation) TNUoS capacity charge.
- 10.3 Changes to the System Operator – Transmission Owner Code (STC) would be required in order that generators' long-term transmission access bookings (and the expiry of such rights) are taken account of by Transmission Owners when planning to accommodate additional transmission capacity requests. Additional STC changes may be required to "back-off" in Scotland any other changes to National Grid's User facing obligations, and the STC Committee has already begun to consider the potential impact of CAP165 on the STC.
- 10.4 If CAP165 or any of its alternatives were to be approved changes to the SQSS may be appropriate. The GBSQSS Review Group has embarked on a major review of the GBSQSS, which will include consideration of this issue.
- 10.5 There will potentially be some impact on the charging methodology. Whilst CAP165 or its alternatives are not reliant on the introduction of fixed charges Users making a long term commitment could find the option to fix their charges for the duration of their booking favourable. This will be consulted upon under the charging governance.

## 11.0 WORKING GROUP VIEW / RECOMMENDATION

11.1 The Working Group believes its Terms of Reference have been completed and that CAP165 has been fully considered. The Working Group recommends to the CUSC Panel that:

- A Consultation Report containing the CAP165 WGAA1, WGAA2, WGAA3, WGCR1, WGCR2, WGCR3 and WGCR5 should proceed to wider Industry Consultation as soon as possible.
- The Working Group Report is accepted by the CUSC Panel and the Working Group is disbanded.

11.2 The Working Group voted on whether they believed the original, the Working Group alternatives and the alternatives developed by the Working Group from the consultation requests were **better than the current baseline**. The results of the vote are described in the following table:

Proposal	Better	Not better	Abstained
Original	3	9	0
WGAA1	2	10	0
WGAA2	4	8	0
WGAA3	6	6	0
WGCR1 (WGAA4)	6	6	0
WGCR2 (WGAA5)	5	7	0
WGCR3 (WGAA6)	6	6	0
WGCR4	2	10	0
WGCR5 (WGAA7)	6	6	0
WGCR6	2	7	3

11.3 The Working Group voted on whether they believed the Working Group alternatives and the alternatives developed by the Working Group from the consultation requests were **better than the original proposal**. The results of the vote are described in the following table:

Proposal	Better	Not better	Abstained
Original	-	-	-
WGAA1	11	1	0
WGAA2	6	5	1
WGAA3	11	1	0
WGCR1 (WGAA4)	9	2	1
WGCR2 (WGAA5)	6	6	0
WGCR3 (WGAA6)	10	2	0
WGCR4	5	6	1
WGCR5 (WGAA7)	8	4	0
WGCR6	3	8	1

11.4 The majority of the Working Group believed WGAA1, WGAA3, WGCR1, WGCR3 and WGCR5 were better than the original. The Chair with the support of the Working Group took forward proposals which had 6 votes in

support. This means that WGAA2 and WGCR2 have also been taken forward.

- 11.5 The Working Group voted on which of the proposals they believe best facilitates the applicable CUSC Objectives. The results of this vote are described in the following table:

<b>Proposal</b>	<b>Best</b>
<b>Original</b>	<b>0</b>
<b>WGAA1</b>	<b>1</b>
<b>WGAA2</b>	<b>2</b>
<b>WGAA3</b>	<b>2</b>
<b>WGCR1 (WGAA4)</b>	<b>3</b>
<b>WGCR2 (WGAA5)</b>	<b>1</b>
<b>WGCR3 (WGAA6)</b>	<b>0</b>
<b>WGCR5 (WGAA7)</b>	<b>3</b>

## 12.0 NATIONAL GRID INITIAL VIEW

- 12.1 National Grid's initial view is that all of the proposed alternatives and the CAP165 original amendment would better facilitate the applicable CUSC objectives when compared against the current baseline. This is due in the most part to the fact that all of the options presented would either:
- (c) offer a finite right and with it the ability to accurately account for the rescission of long term rights by an existing generator when planning transmission works on the GB Transmission System or;
  - (d) the fact that the proposed notice periods to be given by existing users to rescind existing transmission access rights (a range from 15 months to 8 years) would be significantly in excess of the current 5 day minimum requirement.
- 12.2 Other Alternatives also propose an equitable system of liabilities for pre- and post-commissioning generators, again another benefit that would in National Grid's view better facilitate applicable CUSC objective (b).
- 12.3 National Grid is not generally in favour of the amendments which utilise a Pre Commissioning Liability. While National Grid is generally content to forecast Final Sums liabilities at the time that a connection offer is prepared we are not content with the proposal that if actual liabilities incurred are less than forecast then the difference is refunded to the User whereas if actual liabilities are in excess of forecast that liability is borne by National Grid and thence the industry. This in National Grid's view would mean that in the long term this would either cause a general under-recovery of pre-commissioning liabilities from terminating Users and thus result in a cross subsidy of new users by existing users. Alternatively the proposal would drive National Grid to very conservatively forecast Pre Commissioning Liabilities and thus require new Users to provide greater amounts of pre-commissioning security, which could be perceived as a barrier to entry, frustrating applicable CUSC objective (b).
- 12.4 National Grid has also stated through the Working Group discussions that a six year signal of the rescission of long-term rights would be required. This is based upon an normal 6-year lead time for the specification, planning and construction of transmission construction works. From a purely transmission perspective then any alternative that does not give a minimum of a 6 year signal will inevitably result in less than the theoretical maximum saving in transmission works being able to be achieved. However National Grid also recognises that there may be financial benefits associated with a shorter notice period for generators although National Grid is unable to quantify this impact and thus judge the overall optimal notice period for the industry as a whole.
- 12.5 On balance National Grid's initially favoured option is therefore WGAA1.

## 13.0 INDUSTRY VIEWS AND REPRESENTATIONS

### 13.1 Responses to the Working Group Consultation

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

Reference	Company	Supportive
CAP165-WGC-01	Association of Electricity Producers	No
CAP165-WGC-02	British Energy	No
CAP165-WGC-03	British Wind Energy Association	Does not support WGAA3.
CAP165-WGC-04	Centrica	No
CAP165-WGC-05	DONG Walney UK	No comment
CAP165-WGC-06	Drax Power	No
CAP165-WGC-07	EdF Energy	No
CAP165-WGC-08	EON UK	Supportive of WGAA3
CAP165-WGC-09	ESB International	Yes
CAP165-WGC-10	Fairwind (Orkney) Ltd	Yes
CAP165-WGC-11	First Hydro Company	No
CAP165-WGC-12	GDF SUEZ	No
CAP165-WGC-13	Immingham CHP LLP	No
CAP165-WGC-14	Magnox North	No
CAP165-WGC-15	Renewable Energy Association	No
CAP165-WGC-16	RWE npower	Supportive of WGAA2
CAP165-WGC-17	ScottishPower Energy Wholesale	No
CAP165-WGC-18	Scottish Renewables	Does not support WGAA3
CAP165-WGC-19	Scottish and Southern Energy	No
CAP165-WGC-20	Welsh Power	No
CAP165-WGC-21	Wind Energy	No Comment

## **13.2 Views of Panel Members**

13.2.1 A majority of 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. Some Panel members expressed concerns about the lack of cost benefit analysis contained in the report.

## **13.3 Views of Core Industry Document Owners**

13.3.1 None Received

## **ANNEX 1 – WORKING GROUP TERMS OF REFERENCE AND MEMBERSHIP**

### **Working Group Terms of Reference and Membership**

#### **TERMS OF REFERENCE FOR CAP165-166 WORKING GROUP 'ACCESS WORKING GROUP 2'**

##### **RESPONSIBILITIES**

1. The Working Group is responsible for assisting the CUSC Amendments Panel in the evaluation of CUSC Amendment Proposals CAP165 and CAP166 tabled by National Grid at the Amendments Panel meeting on 25<sup>th</sup> 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 for both CAP165 and CAP166:
  - Impact on bilateral agreements (BCA, BEGAs, CONSAG, Offers etc.)
  - Impact on computing systems, central and individual CUSC party
  - Efficiency of investment signals (for generation, transmission and interconnectors)
  - Effect on competition
  - Applicability to embedded generation
  - Impact on industry documents, including SQSS
  - Definitions, including interaction with other codes and methodologies
  - Interaction with proposed Offshore regime
  - A cost benefit analysis, including:
    - Consideration of the cost of carbon
    - Impact on all classifications of users
    - Impact on system operator and transmission owners
  - Impact on maintenance of the reliability, safety and operation of the grid
  - Impact on Security of Supply
  - Ability of CUSC Parties to trade access rights (short and long term) between themselves

- 5.a For CAP165, the Working Group shall also consider and report on the following specific issues:
- Nature and definition of rights (including whether zonal rights are recorded zonally or nodally)
  - Impact on / transition for users with existing rights
  - Application process for extension of rights
  - Efficient use of capacity and relinquishment / reduction of rights
  - Minimum / maximum booking period
  - Definition of an appropriate level of financial security
  - Consideration of user commitment in negative charging zones
  - Equitable treatment of new and existing users
  - Calculation of the trigger period for incremental capacity bookings
  - Consideration of the appropriate level of user commitment for new users
  - The profile of financial security required pre-commissioning
  - Interaction with security requirements for local infrastructure
  - Transition and retrospective application for new users
- 5.b For CAP166, the Working Group shall also consider and report on the following specific issues:
- Type of auction
  - Process for, and timing of, long-term auctions (including detailed business rules)
  - Size and period of capacity block
  - Specification of product (including financial or physical in nature, and rights to compensation)
  - Period of release, including interaction with re-zoning
  - Evaluation of bids for different numbers of years
  - Is there the need for a reserve price?
  - Consideration of negative reserve prices (if any) and bids
  - Long-term Auction restrictions (e.g. would participation eligibility be restricted to those with a local connection or offer for such?)
  - Definition of baselines, and governance of baseline definition
  - Definition of an appropriate level of financial security
  - Impact on users with existing rights
  - Treatment of unsold capacity and incremental capacity
  - Definition of regulatory test for release of incremental capacity
  - Governance of regulatory test for release of incremental capacity
  - Definition of release period for incremental capacity
  - Application process for new connections
  - Transition, including existing commitments for reinforcements
  - Implementation - processes and systems required
  - Consideration of relevant parallels from the gas experience
- 5.c This working group shall have a sub group, the CAP161-166 Enabling Sub-group. The Terms of Reference for this sub-group shall be agreed by the Amendments Panel and shall include the consideration of a number of enabling changes, principally:
- Zonal definition of wider transmission access rights
  - Zoning criteria and methodology governance
  - Definition of local access (intra-zonal access rights)
  - Local only applications
  - Local access charging and financial security requirements
  - Residual charging and credit requirements

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 17<sup>th</sup> July 2008 for circulation to Panel Members. The conclusions will be presented to the CUSC Panel meeting on 25<sup>th</sup> July 2008.

#### **MEMBERSHIP**

13. It is recommended that the Working Group has the following members:

Chair	Hëdd Roberts
National Grid	Andrew Truswell
Industry Representatives	James Anderson
	Graeme Cooper
	Stuart Cotten
	Sebastian Eyre
	Nick Frydas
	Garth Graham
	Paul Jones
	Simon Lord
	Cathy McClay
	Fiona Navesey

	Bill Reed
	Ed Reed
	Helen Snodin
	Lisa Waters
	Barbara Vest
Authority Representative	Min Zhu / David Hunt
Technical Secretary	Sarah Hall

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 CAP165 and CAP166 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. 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 Chairman should contact the CUSC Panel Secretary.

## **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 25<sup>th</sup> 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:
  - (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 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 (WGAA's).

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 17<sup>th</sup> 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	Hédd Roberts (National Grid)
National Grid Representative	Craig Maloney
Industry Representatives	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	Beehun Tan/ Qiong Zhou (Jo)
Authority Representative	Anthony Mungall
Technical Secretary	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 25<sup>th</sup> 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.



### Working Group 3

Date	12-May	27-May	04-Jun	16-Jun	29-Jun	13-Jul	29-Jul	13-Aug	22-Aug	02-Sep	12-Sep	25-Sep	10-Nov
Meeting No.	1	2	3	4	5	6	7	8	9	10	11	12	13

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
David Lewis	1												
Bee Hun Tan				1	1	1	1	1	1		1	1	
Tom Ireland	1	1	1	1	1	1	1	1	1		1		1
Chris Barrass	1	1		1		1	1						
Qiong Zhou (Jo)	1	1		1	1	1	1	1	1		1	1	
Brian Taylor		1											
Michael Dodd			1		1		1		1			1	
Sebastian Eyre			1			1							
Emma Luckhurst			1		1	1	1				1	1	
Andrew Rimmer			1										
Dan Jerwood			1										
Stefan Leedham				1									
Stephen Curtis				1	1		1	1			1	1	1
Garth Graham					1								
Owen Wilkes					1								
David Walker						1							
Stuart Cotten						1	1	1					
James Anderson							1					1	
Stuart Cook						1					1		
David Scott													1

Cancelled

### ANNEX 3 – AMENDMENT PROPOSAL FORM

<b>CUSC Amendment Proposal Form</b>	<b>CAP:165</b>
<b>Title of Amendment Proposal:</b>	
Transmission Access – Finite Long-term Entry Rights	
<b>Description of the Proposed Amendment (mandatory by proposer):</b>	
<p>Introduction of temporally defined finite long-term entry access rights, and associated user commitment.</p> <p>It is proposed that existing generators would nominate the number of (whole financial) years for which they require long-term entry access rights to the GB transmission system. This would be underpinned by user commitment in the form of a liability to pay associated charges and a requirement for financial security to be put in place. This will be developed during the assessment of the proposed amendment, in accordance with the Best Practice Guidelines for Gas and Electricity Network Operator Credit Cover. The commitment would be for any period requested by the user (i.e. there would be no rolling time limit), and rights could be extended by application at any time.</p> <p>New generators (and any existing generators requesting an increased level of long-term entry access) would be required to book a defined number of years of entry access rights (“the trigger period”), and provide the associated user commitment (which would be approximately equivalent to 50% of the cost of providing the incremental capacity). This would replace the existing “final sums” regime.</p> <p>The above requirements would apply to access to the wider transmission system. Separate arrangements would be put in place for infrastructure comprising generators’ local connections to the wider system, including appropriate user commitment (which may be approximately equivalent to 100% of costs).</p> <p>It should also be noted that the concurrent proposal to remove the residual element of the entry Transmission Network Use of System (TNUoS) capacity charge in the Use of System Charging Methodology means that the duration of the trigger period would need to be calculated on the basis of this revised charging regime (i.e. it would only be based on the wider locational element of the TNUoS charge). Consideration will additionally need to be given to the security arrangements to be put in place for the residual charge.</p> <p>It is further proposed that long-term entry access rights be defined on a zonal basis, such that each User can share capacity between its power stations on a real time basis at a 1:1 exchange rate within defined zones.</p>	
<b>Description of Issue or Defect that Proposed Amendment seeks to Address (mandatory by proposer):</b>	
<p>The current entry access arrangements for existing generators do not provide any certainty for National Grid and Transmission Owners, in that such users have a rolling option to renew their rights to access the transmission system on an annual basis. Should they wish to decline this option, they have the ability to give as little as five days’ notice. This uncertainty can lead to inefficient investment signals, in that the planning of incremental capacity currently can take little, if any, account of the potential future release of existing capacity. Additionally, existing generators are not required to put in place any financial security, even for the one year’s worth of charges they currently incur a liability for.</p>	

In contrast, new generators are required to fully secure the costs of any reinforcements required to provide incremental access capacity ahead of commissioning. Whilst giving full user commitment, these arrangements are not explicitly defined in the existing commercial frameworks, and it has been suggested that the level and volatility of final sums are perceived as a barrier to entry.

The proposer believes that both of the above issues would be addressed through the introduction of temporally defined finite long-term entry access rights, with associated user commitment. Existing and new generators would be required to provide equivalent levels of user commitment, ensuring the equitable treatment of the two groups and providing efficient investment signals. In addition, replacement of the current final sums methodology with the booking of a trigger period of years' worth of entry capacity access rights would promote transparency and certainty. This would address the perceived barriers to entry, and would provide more confidence in the firmness of capacity applications.

**Impact on the CUSC (*this should be given where possible*):**

The impact on the CUSC would include, but may not be limited to, changes to Sections 2 (Connection), 3 (Use of System), 6 (General Provisions) and 9 (Interconnectors). There would also be consequential changes required to Section 11 (Interpretation and Definitions), and potentially to the CUSC Schedules and Exhibits.

**Impact on Core Industry Documentation (*this should be given where possible*):**

No impact on Core Industry Documentation has been identified, but it is suggested that this would be reviewed during the assessment of the proposed amendment.

**Impact on Computer Systems and Processes used by CUSC Parties (*this should be given where possible*):**

CUSC Parties' models of the financial viability of new and existing power stations and interconnectors would need to take into account the revised arrangements.

**Details of any Related Modifications to Other Industry Codes (*where known*):**

Related modifications to the Use of System Charging Methodology would be proposed to cost reflectively charge local infrastructure; to remove the residual element of the entry (generation) TNUoS capacity charge (and instead recover this through a commodity charge based on £/kWh); and to revise the zoning criteria for generation TNUoS charges. It is proposed that such zones would be set by reference to a zonal definition methodology which would be described in a separate statement (and it is further proposed that a requirement for such a methodology would be contained in National Grid's electricity transmission licence).

Consideration would be given to the wider locational charges (i.e. those remaining after the separation of the local infrastructure and residual charges) to apply over the period for which generator long-term entry access bookings were made, including fixed, and index linked, tariffs. Any changes in this area would also be progressed through a modification to the Use of System Charging Methodology, and would include any mechanisms required to resolve under- or over-recoveries resulting from fixed tariffs.

Changes to the System Operator – Transmission Owner Code (STC) would be required in order that generators' long-term bookings (and the expiry of such rights) are taken account of by Transmission Owners when planning to accommodate additional capacity requests. Additional STC changes may be required to "back-off" in Scotland any other changes to National Grid's User facing obligations.

**Justification for Proposed Amendment with Reference to Applicable CUSC Objectives\*\*  
(mandatory by proposer):**

The proposed amendment would better facilitate the achievement of Applicable CUSC Objective (a), the efficient discharge by the licensee of the obligations imposed upon it under the Act and by the licence, in that the more efficient investment signals that would result, and the consequentially reduced risk of stranding, would better allow National Grid as the licensee to discharge its obligation under the Act to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

The proposed amendment would also better facilitate the achievement of Applicable CUSC Objective (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, as:

- Existing and new generators would be required to provide equivalent levels of user commitment, thereby ensuring the equitable treatment of the two groups;
- Existing capacity could be reallocated with certainty to new entrants as result of the firm bookings of capacity made by existing generators; and
- The enhanced transparency in the commercial frameworks of required user commitments and increased certainty would address the perceived barriers to entry, thereby providing more confidence in the firmness of capacity applications, and increasing competition.

<b>Details of Proposer:</b> Organisation's Name:	National Grid Electricity Transmission plc
Capacity in which the Amendment is being proposed:  (i.e. CUSC Party, BSC Party or "energywatch")	CUSC Party
<b>Details of Proposer's Representative:</b> Name: Organisation: Telephone Number: Email Address:	Andrew Truswell National Grid 01926 656369 <a href="mailto:andrew.truswell@uk.ngrid.com">andrew.truswell@uk.ngrid.com</a>
<b>Details of Representative's Alternate:</b> Name: Organisation: Telephone Number: Email Address:	Duncan Burt National Grid 01926 656703 <a href="mailto:duncan.burt@uk.ngrid.com">duncan.burt@uk.ngrid.com</a>
<b>Attachments (Yes/No):</b> No <b>If Yes, Title and No. of pages of each Attachment:</b>	

**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](mailto: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.

## ANNEX 4 – RESULT OF WORKING GROUP VOTE

The Working Group voted on whether they believed the original, the Working Group alternatives and the alternatives developed by the Working Group from the consultation requests were **better than the current baseline**. The results of the vote are described in the following table:

Proposal	Better	Not better	Abstained
Original	3	9	0
WGAA1	2	10	0
WGAA2	4	8	0
WGAA3	6	6	0
WGCR1 (WGAA4)	6	6	0
WGCR2 (WGAA5)	5	7	0
WGCR3 (WGAA6)	6	6	0
WGCR4	2	10	0
WGCR5 (WGAA7)	6	6	0
WGCR6	2	7	3

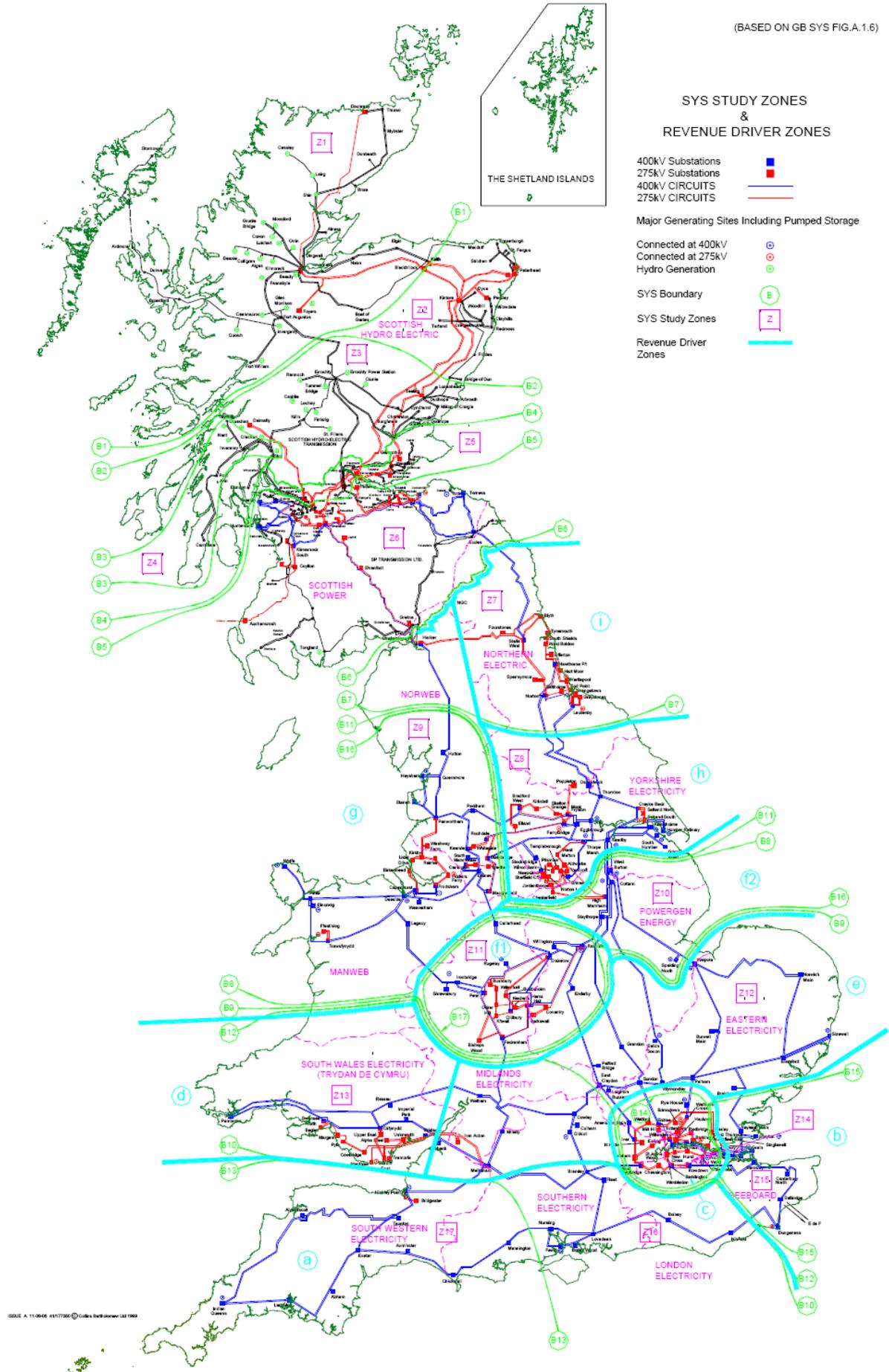
The Working Group voted on whether they believed the Working Group alternatives and the alternatives developed by the Working Group from the consultation requests were **better than the original proposal**. The results of the vote are described in the following table:

Proposal	Better	Not better	Abstained
Original	-	-	-
WGAA1	11	1	0
WGAA2	6	5	1
WGAA3	11	1	0
WGCR1 (WGAA4)	9	2	1
WGCR2 (WGAA5)	6	6	0
WGCR3 (WGAA6)	10	2	0
WGCR4	5	6	1
WGCR5 (WGAA7)	8	4	0
WGCR6	3	8	1

- 1.1 The majority of the Working Group believed WGAA1, WGAA3, WGCR1, WGCR3 and WGCR5 were better than the original. The Chair, with the support of the Working Group, took forward proposals which had 6 votes in support. The means that WGAA2 and WGCR2 have also been taken forward.
- 1.2 The Working Group voted on which of the proposals they believe best facilitates the applicable CUSC Objectives. The results of this vote is described in the following table:

<b>Proposal</b>	<b>Best</b>
Original	0
WGAA1	1
WGAA2	2
WGAA3	2
WGCR1 (WGAA4)	3
WGCR2 (WGAA5)	1
WGCR3 (WGAA6)	0
WGCR5 (WGAA7)	3

# ANNEX 5 – ENGLAND AND WALES REVENUE DRIVER ZONES



**ANNEX 6 – MATRIX OF CAP165 WORKING GROUP DEVELOPMENTS OF CONSULTATION REQUESTS AND WGAA6s**

ID	Proposer	Nature of Rights	Pre-Commissioning Securities / Liabilities	Post-Commissioning Securities / Liabilities	Other Issues
WGAA1	Developed through Working Group Discussions (NGET - Mark Duffield)	Finite right Minimum 8 year booking for new Users Nodal rights	Liabilities match Securities Pre-Trigger Date: Yr 1 = £1/kW, Yr2 = £2/kW, Yr3 onwards £3/kW Post-Trigger Date: 8 × TNUoS scaled pre Completion Date T as follows: T-1 = 100%, T-2 = 75%, T-3 = 50%, T-4 = 25% TNUoS rate applicable is that at time of termination	Liabilities: Pay remainder of TNUoS booking Securities: Zero	May amend pre-commissioning securities / liabilities such that the TNUoS Tariff is fixed at the time of offer signature (and not the TNUoS tariff at time of termination)
WGAA2	Developed through Working Group Discussions (RWE npower – Bill Reed)	As WGAA1	Securities match Liabilities: Cost Reflective Final Sums fixed at forecast at time of offer signature	As WGAA1	None
WGAA3	Developed through Working Group Discussions (Drax Power Ltd – Stuart Cotten)	Enduring Right with minimum 4-year notice of reduction in TEC Nodal Rights	As WGAA1, with exception that TNUoS Rate fixed at time of offer signature	Security as WGAA1 Liability to pay 4 years of TNUoS	None
WGCR1 (WGAA4)	SSE Generation Ltd (Garth Graham)	Enduring Right with minimum 15months notice of reduction in TEC Minimum 4 year booking for new Users	As WGAA3	Securities as WGAA1 Liability to pay 15 months of TNUoS	None
WGCR2 (WGAA5)	First Hydro Company (Simon Lord)	As WGAA3 but with an 8-year rolling commitment	As WGAA2 (Cost-Reflective Final Sums) but with caveat that given Completion Date T CRFSL are scaled according to the following: T-1: 25%, T-2: 50%, T-3: 75%, T-4: 100%	As WGAA3	None
WGCR3 (WGAA6)	Centrica (Merel Van der Neut Kolschoten)	As WGAA3 but with a 2 year notice period to reduce TEC	As WGAA3	As WGAA3	None
WGCR4	Uskmouth Power & Severn Power (Rebecca Williams)	As WGAA1	As WGAA1 however securities (and liabilities) will be restricted to the period 7 years prior to the Completion Date T (as in CAP131)	As WGAA1	May amend pre-commissioning securities / liabilities such that the TNUoS Tariff is fixed at the time of offer signature (and not the TNUoS tariff at time of termination)
WGCR5 (WGAA7)	Uskmouth Power & Severn Power (Rebecca Williams)	As WGAA3	As WGAA3 however securities (and liabilities) will be restricted to the period 7 years prior to the Completion Date T (as in CAP131)	As WGAA3	None
WGAA6	Fairwind Statkraft (Orkney) Ltd (Dennis Gowland)	As WGAA3	Pre-Trigger Date securities & Liabilities are unchanged from WGAA1. Post Trigger Date as WGAA1 but vary dependent on whether full planning permission for full TEC has been granted: <b>No Planning Permission:</b> Securities = Liabilities and based upon 8×TNUoS scaled according to the following factors: Given a Completion Date of T, T-4 = 100%, T-3 = 75%, T-2 = 50%, T-1 = 25%. <b>Full Planning Permission</b> Liabilities as above. Securities equal 8×TNUoS scaled according to the following factors: T-4 = 50%; T-3 = 42%; T-2 = 34%; T-1 = 25%.  In all cases, TNUoS rate applicable is that at time of termination	As WGAA3	May amend pre-commissioning securities / liabilities such that the TNUoS Tariff is fixed at the time of offer signature (and not the TNUoS tariff at time of termination)
N/A	Uskmouth Power & Severn Power (Rebecca Williams)	All other WGAA Proposals	All other WGAA Proposals	All other WGAA Proposals	As a transitional process, all existing Users would be given the option to retain their current securities / liabilities. This is pending a review of the practical consequences of this on existing classes if user. The intention is that no existing user will need to re-finance as a consequence of CAP165

# ANNEX 7 – PRESENTATIONS MADE TO THE WORKING GROUP

## Meeting One – 14<sup>th</sup> May 2008

### CAP165: Transmission Access – Finite Long-term Entry Rights

CUSC Panel and TCMF  
April 2008



### Overview

	CUSC	Charging Methodology	Other
Short-term	CAP161: SO release of short-term rights CAP163: Entry capacity sharing CAP162: Entry overrun CAP164: Connect and manage	Ex post cost reflective charge	
Long term	CAP165: Finite long-term entry rights CAP166: Entry capacity auctions	Fixed price tariffs Auction resultant changes	Capacity release methodology
Supporting changes	Zonal access rights Local only applications	Zoning criteria Local asset charging /kWh residual charge	Zonal definition methodology



### “Evolutionary Change” Straw Man

	CUSC	Charging Methodology	Other
Short-term	CAP161: SO release of short-term rights CAP163: Entry capacity sharing CAP162: Entry overrun CAP164: Connect and manage	Ex post cost reflective charge	
Long term	CAP165: Finite long-term entry rights CAP166: Entry capacity auctions	Fixed price tariffs Auction resultant changes	Capacity release methodology
Supporting changes	Zonal access rights Local only applications	Zoning criteria Local asset charging /kWh residual charge	Zonal definition methodology



- ### Defect
- Current access arrangements do not provide certainty for TOs
    - Only 5 days' notice required for TEC decreases
    - May lead to inefficient investment signals
    - Prevents reallocation of existing capacity to new entrants
  - No requirement for financial security from existing generators
  - In contrast, new generators required to fully secure costs of incremental capacity required
  - This provides full user commitment, but:
    - Final Sums arrangements not defined in commercial frameworks
    - Level and volatility perceived as a barrier to entry
    - Inequitable treatment compared to existing generators
- 

- ### Proposed Solution
- CAP165: Finite long-term entry rights
- Introduction of temporally defined finite long-term entry access rights, and associated user commitment
  - Existing generators would nominate the (whole financial) years for which long-term entry access rights required
  - Would be underpinned by user commitment, in form of liability to pay charges and requirement for appropriate financial security
  - Rights would be extended by application
  - Incremental capacity would be triggered by booking a defined number of years' worth of access and providing associated user commitment (approximately 50% of the cost)
  - Separate arrangements to be put in place for local infrastructure
  - Account to be taken of changes to residual charge (incl security)
  - Access rights to be defined on a zonal basis
- 

- ### Applicable Objectives and Recommendation
- #### Objectives
- CAP165 better facilitates CUSC Applicable Objective (a) as improved investment signals would better allow development of an efficient, co-ordinated and economical transmission system
  - CAP165 better facilitates CUSC Applicable Objective (b) as:
    - Equivalent user commitment required from new and existing users
    - Existing capacity could be reallocated to new entrants
    - Enhanced transparency and certainty of commitments required
- #### Recommendation
- National Grid recommends that CAP165 should be assessed by a joint CAP165-166 Working Group, for a period of 3 months
  - National Grid further recommends that certain elements of CAP165 that are common across CAP161-166 be assessed by a sub-group, for a period of 3 months
- 

## Long-term Fixed Price Tariffs

Fixed price  
tariffs

- Under CAP165, generators will be making long-term bookings
- Given the certainty associated with the booking, it may be appropriate to give certainty as to the tariff that will be paid for the duration of the booking
- Impossible to accurately calculate tariffs beyond a few years
- Therefore, should consider, for the duration of the booking:
  - Fixed tariffs; or
  - Index linked tariffs – to RPI?
- Should these be based on tariffs prevailing at time of booking, or take account of longer-term modelling?
- Will also need to consider mechanism for resolving under- and over-recoveries
  - Anticipated that this would be through the (now separated, commoditised) residual
- Local charges also assumed to be split out [nationalgrid](#)

## Meeting Two – 29<sup>th</sup> May 2008

### Finite Long-term Entry Rights for Existing Users

Transmission Access Working Group 2  
29<sup>th</sup> May 2008

nationalgrid

### Agenda

- ◆ Nature and definition of rights
  - ◆ Implementation of zonal access rights
- ◆ Transition / impact on existing users
- ◆ Application process for extension of rights
- ◆ Trading / relinquishment of rights
- ◆ End to end process

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### Nature and definition of rights (1)

- ◆ The nature and definition of current entry access rights are listed in black (based on a "Key generic features of access models", Min Zhu, 5<sup>th</sup> November 2007)
- ◆ Proposed changes under CAP165 are highlighted in red
- ◆ Type
  - ◆ Entry-Exit (Explicit entry, implicit exit)
- ◆ Valid duration
  - ◆ Annual (with renewal) → No automatic renewal
- ◆ Location
  - ◆ Nodal → Zonal

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### Nature and definition of rights (2)

- ◆ Entitlement
  - ◆ Financial
    - ◆ Compensation mostly market & value based
- ◆ Obligations
  - ◆ Use of system charges
  - ◆ Notification of closure → Provided by long term booking
- ◆ Enforcement
  - ◆ Prohibition
- ◆ Allocation
  - ◆ Invest & connect (improved investment information)
  - ◆ First-come-first-served
  - ◆ Final sums → Generic commitment

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### Implementation of zonal access rights

- ◆ Zonal long term entry access rights could be implemented by:
  - ◆ Explicitly defining rights on a zonal basis
    - ◆ Each user would have a zonal UoS agreement?
  - ◆ Or continuing to define rights nodally, but cashing out overrun zonally
    - ◆ i.e. a user's power station could exceed TEC to the extent its other power stations in the zone were under-utilising TEC, without attracting an overrun charge
    - ◆ Much simpler to implement, but how does this work without CAP162?
      - ◆ May need legal text removing breach of CUSC in these circumstances?
    - ◆ Would be easier to transition if zones revised

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### Transition / impact on existing users

- ◆ All existing generators with TEC will be offered equivalent long term zonal access rights
- ◆ During transition (i.e. just prior to implementation) such generators will be invited to nominate the number of (whole financial) years for which they require long term zonal access rights
  - ◆ Should "gaps" be permitted?
  - ◆ Should there be a maximum period for which rights can be booked?
- ◆ Therefore no rights would be withdrawn from users
- ◆ But users would:
  - ◆ Be required to nominate when they wish their rights to end
  - ◆ Incur a liability for the period of the booking
  - ◆ Be required to provide appropriate security
    - ◆ This is covered in a separate presentation

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### Application process for extension of rights

- End date of long term entry right would be defined in the Appendix C of the bilateral agreement (e.g. 31/03/xx)
- This could be extended by a Modification Application
- Where no works were required (i.e. the capacity had not been reallocated) an offer would be made within 28 days
- A (relatively small) application fee would be levied
  - Precedence suggests this would be refunded if the offer accepted
- Where works were required, the timetable would be extended to 3 months, and the remainder of the application fee would be levied
- Issues:
  - Should "gaps" be permitted?
  - Should there be a maximum period for which rights can be booked?
    - Is this linked to the stability of zones?



### Trading / relinquishment of rights

- Rights granted would be tradeable as today
  - CAP068 process for permanent trades
    - But traded capacity would be time limited
  - CAP142 process for temporary trades
- CAP163 would introduce intra-zonal sharing
  - CAP068 and CAP142 become inter-zonal
  - Need to review existing legal text, both:
    - For CAP165; and
    - For a CAP165 and CAP163 combination
- No provision for return of rights to SO
  - Would only be of value to SO if capacity scarce
    - Therefore demand from other users
  - But a termination fee (equal to the remaining liability) may be paid to end the booking prematurely



### End to end process

- New generator applies for connection by booking entry rights for at least [6] years from the Completion Date
  - How should bookings for more than [6] years be dealt with?
    - Should the generator be required to secure the increment pre-completion?
- Once commissioned, the generator may extend the booking at any time via a Modification Application
  - But capacity is allocated first-come-first-served, so capacity may have already been allocated
- If booked rights are not required, they may be:
  - Traded permanently [inter-zonally]
  - Traded temporarily [inter-zonally]
  - [Shared intra-zonally] [dependent on CAP163]
- Alternatively, a termination fee (equal to the remaining liability) may be paid to end the booking prematurely
- At the end of the booking, capacity will be reallocated to another user (assuming demand for it)



### Transmission Network Use of System Tariffs for Finite Long-term Entry Rights

*Transmission Access Working Group 2  
29<sup>th</sup> May 2008*



### Agenda

- Background
- Options
- Basis
- Applicability
- Resolving over- and under-recoveries



### Background

- Under CAP165, generators will be making long-term bookings
- Two drivers to fix generation TNUoS tariffs:
  - Users will be providing certainty through the booking, therefore it may be appropriate to give users certainty in the tariff to be paid
  - Might otherwise be difficult to forecast Value at Risk



## Options

- ◆ No fixing – just pay prevailing charges
- ◆ Fix – same charge for duration of booking
- ◆ Index linked to:
  - RPI
  - RPI+2 (i.e. prevailing price control term)
  - Expansion Constant
    - ◆ i.e. RPI during a price control period with step changes at price control reviews
  - Producer prices

**nationalgrid**

## Basis

- ◆ If fixing a tariff for the duration of the booking, what would the basis of the tariff be?
  - Prevailing tariff at time of booking?
  - A forecast?
    - ◆ Over the whole period of the booking?
      - If data was available
    - ◆ Over the next [x] years?
      - Condition 5 report "forecasts" for 5 years
    - ◆ Trade off between accuracy and transparency
      - But contracted position should become more accurate as a result of finite rights

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## Applicability

- ◆ Locational
  - Relatively simple, but only fixing locational means that user exposed to changes in residual
    - ◆ Although these would be smeared over all users
- ◆ Locational and Residual
  - Genuinely fixed charge, but would be difficult to forecast changes in residual across price control periods
  - If residual used for resolving under- and over-recoveries, significant volatility would result

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## Resolving over- and under-recoveries

- ◆ Have largely assumed that over- and under-recoveries would be recovered in the Generation Residual
  - i.e. Would continue to recover 27% of TNUoS revenue from generation
  - Any shortfall or surplus in locational revenues recovered from generators would be balanced by appropriate changes in the generation residual
    - ◆ i.e. residual would be difference in generation locational revenue recovered and 27% of MAR
  - Unlikely to over-recover to such an extent that residual would go negative (unlike auctions?)
- ◆ Demand and Generation Residual (i.e. revising/removing 27/73 split)
  - i.e. would calculate charges as now, then compare generation locational charges received with those prevailing
    - ◆ Difference would be applied evenly across demand and generation
    - ◆ But generation residual commoditised?

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## Security Requirements for Finite Long-term Entry Bookings

*Transmission Access Working Group 2  
29<sup>th</sup> May 2008*

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## Agenda

- ◆ Why might security be required?
- ◆ Credit concepts
- ◆ Current situation for generation
- ◆ What is the Value at Risk for a long-term booking?
  - Linkage to pre-commissioning to be discussed next meeting
- ◆ Unsecured credit allowance
- ◆ Credit tools

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### Why might security be required?

- Current rolling annual nature of TEC may lead to inefficient investment signals and prevents reallocation of existing capacity to new entrants
- CAP165 proposes to address this through user commitment to multi-year bookings
  - An appropriate amount of security would be required to give commitment and cover the risk of payment default
  - Value at Risk arguably increases as a result
  - Alternative would be to pass-through and expose all users to this risk
- If tariffs fixed, also need to ensure that perverse incentives are not created for users to move from a given fixed price tariff to a lower tariff
  - It may be necessary to have a termination fee, with appropriate security cover, that would be called in if the contract were not honoured

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### Credit concepts

- Value at Risk (VaR)
  - If a user were to default, what is the exposure in terms of outstanding charges and liabilities?
- Unsecured credit allowance
  - How much “free” or “user allowed credit” should be extended to the user based on its creditworthiness
- Credit Tools
  - The difference between the VaR and the unsecured credit allowance would need to be secured through the provision of credit tools
    - i.e. this is the amount of security actually lodged

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### Current situation for generation

- Generators do not currently provide security for TNUoS charges
- Security is provided for:
  - BSUoS
  - Termination Amounts for Connection Charges
  - Final Sums
- Provisions for BSUoS security are in CUSC Section 3
  - Based on Ofgem’s “Best practice guidelines for gas and electricity network operator credit cover”
- Provisions regarding security for Termination Amounts are in CUSC Section 2
  - Unlimited unsecured credit extended to users with a credit rating of A- (and DNOs)
- Provisions for Final Sums are in the Construction Agreement
  - But based on those for termination amounts

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### What is the Value at Risk for a long-term booking?

- All charges to be paid for the entire period of the booking?
  - But if the tariff not fixed, will need to be forecast
- Until capacity resold?
  - By generator; or
  - By GBSO
    - But how can the value and timing of this be forecast?
- Best Practice Guidelines suggest that the VaR is the difference between the contract value and the value that can be recovered by the GBSO through resale (para 3.31)
- Should the VaR be capped by commitment for additional capacity? (i.e. industry takes 50% of risk)
- Or could be deemed to be the remainder of current year? (i.e. industry takes risk in future years if not resold)

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### Unsecured credit allowance (1)

- “Best practice guidelines” state that the maximum amount of unsecured credit to be extended should be 2% of the Network Operator’s RAV
  - This is then scaled based on credit rating
  - Unsecured credit can also be extended based on payment record or an independent credit assessment
- Maximum unsecured credit allowance is £128.5m
- “Best practice guidelines” designed to address suppliers
  - Suppliers have no assets
- Are generators different?
  - Could more credit be extended?
    - But is this already factored in by ratings agencies?
    - Will Ofgem approve something not in line with “Best practice”?

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### Unsecured credit allowance (2)

Credit rating	Credit allowance as % of maximum	Current value for NGET
AAA/AA	100	£128.5m
A	40	£51.4m
BBB+	20	£25.7m
BBB	19	£24.4m
BBB-	18	£23.1m
BB+	17	£21.8m
BB	16	£20.6m
BB-	15	£19.3m

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### Credit tools

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- ◆ The difference between VaR and the unsecured credit allowance can be secured using:
  - Cash in Escrow
  - Letter of Credit
  - Qualifying Guarantee
  - Bilateral Insurance Policy
  - Insurance Performance Bond
  - Independent Security Arrangement
- ◆ However, there is a cost to these
- ◆ If VaR is full value of the contract and unsecured credit is as per the "Best practice guidelines", there could be a significant cost to the industry?

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## Meeting Three – 11<sup>th</sup> June 2008

### Locational and Residual TNUoS Split

Transmission Access Working Group 2  
Meeting 3, 11<sup>th</sup> June 2008

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### Locational and Residual TNUoS Split

#### Agenda

- Locational and Residual
  - Revenue recovery
  - Tariffs
- Re-referencing the locational
- Introducing the residual
- Generation : Demand ratio
  - Revenue recovery
  - Tariffs

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### Revenue Recovery

#### Residual : Locational

- The total revenue recovered through the TNUoS tariffs is £1.35bn
- £365mn (27%) of this total is recovered from generation
- The total recovery from the residual section of the tariff from generation is £315mn
- The total recovery from the locational section of the tariff is £50mn
- The locational recovery is the sum of £175mn from positive zones and -£125mn in negative zones

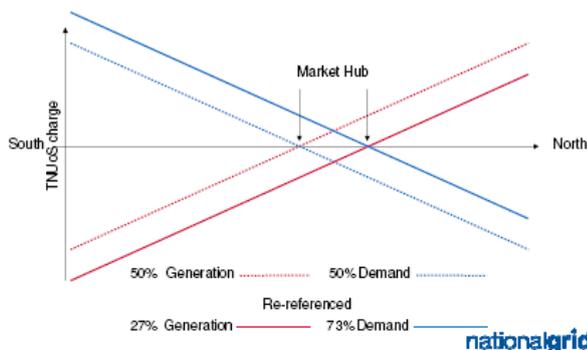
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### Locational and Residual Tariffs

	Zone	Total Tariff (£/kW)	Locational (£/kW)	Residual (£/kW)
1	North Scotland	22.28	18.15	4.11
2	Peterhead	19.78	15.65	4.11
3	Western Highland & Slys	20.53	16.42	4.11
4	Central Highlands	16.74	12.63	4.11
5	Argyll	15.08	10.95	4.11
6	Stirlingshire	14.38	10.25	4.11
7	South Scotland	13.52	9.41	4.11
8	Aachenr esch	10.38	6.27	4.11
9	Humber, Lancashire	6.32	2.21	4.11
10	North East England	9.95	5.84	4.11
11	Anglsey	6.83	2.72	4.11
12	Dinorwig	9.82	5.71	4.11
13	South Yorks & North Wales	4.42	0.21	4.11
14	Midlands	2.32	-1.79	4.11
15	South Wales & Thames Valley	-2.47	-6.58	4.11
16	Central London	-5.66	-9.77	4.11
17	South East	1.22	-2.89	4.11
18	Oxon & South Coast	-0.01	-4.12	4.11
19	Wessex	-2.57	-6.68	4.11
20	Peninsula	-8.53	-12.63	4.11

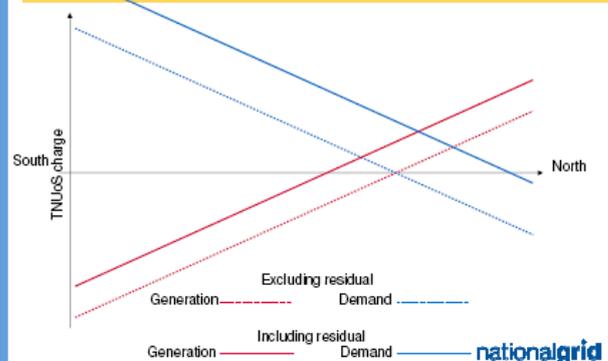
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### Re-referencing the Locational Charge



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### Introducing the Residual



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## Revenue Recovery

Generation : Demand Split

Generation : Demand	50:50	27:73
Total Revenue	£1.35bn	£1.35bn
Recovered from generation	£365mn	£365mn
- Residual - Locational	£270mn £95mn (£210mn - £115mn)	£315mn £50mn (£175mn - £125mn)

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## Locational Tariffs

Zone	50:50 Locational (£/kW)	27:73 Locational (£/kW)
1 North Scotland	18.74	18.15
2 Peterhead	16.24	15.85
3 Western Highland & Skye	17.02	16.42
4 Central Highlands	13.23	12.83
5 Argyll	11.55	10.95
6 Stirlingshire	10.84	10.25
7 South Scotland	10.04	9.41
8 Auchenroch	6.86	6.27
9 Humber, Lancashire	2.83	2.21
10 North East England	6.46	5.84
11 Anglesey	3.34	2.72
12 Dinorwig	6.23	5.71
13 South Yorks & North Wales	0.93	0.31
14 Midlands	-1.17	-1.79
15 South Wales & Thames Valley	-5.56	-6.58
16 Central London	-9.15	-9.77
17 South East	-2.27	-2.89
18 Oxon & South Coast	-3.50	-4.12
19 Wessex	-6.08	-6.88
20 Peninsula	-12.01	-12.83

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## Fixed TNUoS tariffs under a long-term finite entry rights regime

Transmission Access Working Group 2  
Meeting 3, 11<sup>th</sup> June 2008

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## Fixed TNUoS Tariffs

### Agenda

- Task and assumptions
- Results
  - Locational
  - Residual
- Conclusions

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## Fixed TNUoS Tariffs

### Task and assumptions

- Compare actual 2008/09 locational generation TNUoS tariffs with:
  - 2006/07 locational generation TNUoS tariffs
  - 2008/09 locational generation TNUoS tariffs that would have been forecast in December 2005
- Compare commoditised residual generation TNUoS tariff that would have been set for 2008/09 with those that would have resulted in the above two scenarios
  - Assume same generation charging base as actual 2008/09
  - Assume all generators on relevant fixed locational tariff
- Uses 2008/09 generation TNUoS zones
- Based on 73/27 locational revenue split

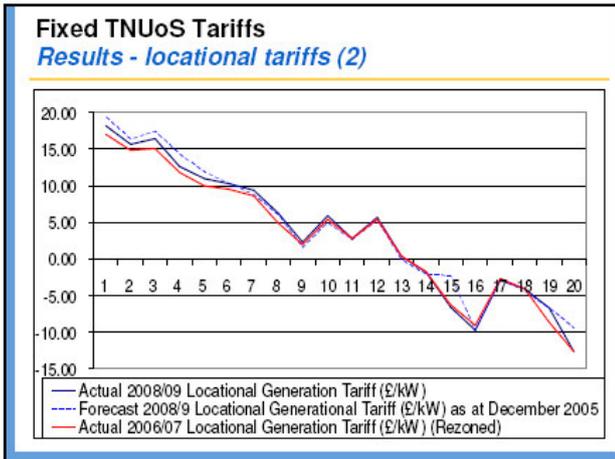
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## Fixed TNUoS Tariffs

### Results - locational tariffs (1)

Zone No.	Zone Name	Actual 2008/09 Locational Generation Tariff (£/kW)	Forecast 2008/09 Locational Generation Tariff (£/kW) as of December 2005	Difference	Actual 2006/07 Locational Generation Tariff (£/kW) (Record)	Difference
1	North Scotland	18.15	18.21	-0.06	18.02	-0.19
2	Peterhead	16.05	16.22	-0.17	15.84	-0.21
3	Western Highland & Skye	16.42	17.02	-0.60	16.02	-0.40
4	Central Highlands	12.83	13.23	-0.40	11.86	-0.97
5	Argyll	10.95	11.55	-0.60	9.97	-0.98
6	Stirlingshire	10.25	10.84	-0.59	9.45	-0.80
7	South Scotland	9.41	10.04	-0.63	8.52	-0.89
8	Auchenroch	6.27	6.86	-0.59	4.87	-1.40
9	Humber & Lancashire	2.21	2.83	-0.62	2.01	-0.20
10	North East England	5.84	6.46	-0.62	5.77	-0.07
11	Anglesey	2.72	3.34	-0.62	2.73	0.01
12	Dinorwig	5.71	6.23	-0.52	5.39	-0.32
13	South Yorks & NWales	0.31	0.93	-0.62	0.30	-0.01
14	Midlands	-1.79	-2.09	0.30	-1.76	0.04
15	South Wales & Gloucester	-6.58	-5.56	-1.02	-6.29	-0.29
16	Central London	-9.77	-9.86	0.09	-9.95	0.18
17	South East	-2.89	-2.70	-0.19	-2.72	-0.16
18	Oxon & South Coast	-4.12	-4.61	0.49	-4.07	0.05
19	Wessex	-6.88	-6.70	-0.18	-6.82	-0.06
20	Peninsula	-12.83	-12.01	0.82	-12.71	-0.12

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### Fixed TNUoS Tariffs

#### Results – residual tariff

	Residual Tariff (£/MWh)	Change
Using Actual 2008/09 Locational Tariffs	0.978169	
Using Forecast 2008/09 Locational Tariffs	0.980331	0%
Using Actual 2006/07 Locational Tariffs	1.031050	5%

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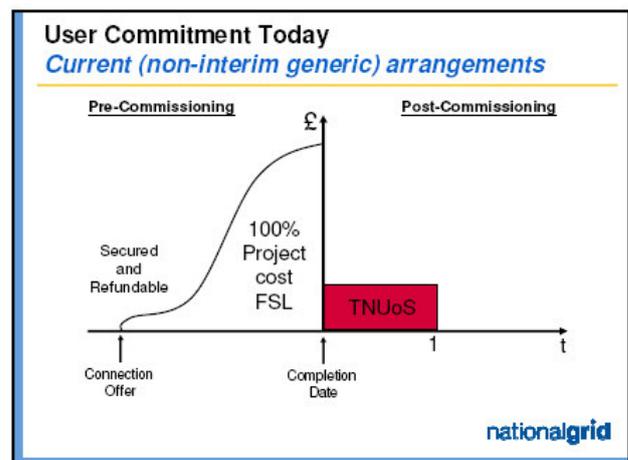
- ### Fixed TNUoS Tariffs
- #### Results – conclusions
- Actual 2008/09 locational generation tariffs generally lower than had been forecast because some new generation was not connected as forecast
  - However, some was connected so 2008/09 tariffs generally higher than 2006/07
  - If all generators had been "locked in" to 2006/07 tariffs, the commoditised residual charge would have been 5% higher in 2008/09 than if prevailing locational charges had been used
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### CAP165 - User commitment for incremental access rights

*Transmission Access Working Group 2  
Meeting 3, 11<sup>th</sup> June 2008*

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- ### User commitment for incremental access rights
- #### Agenda
- User commitment today
  - CAP131 proposal
  - CAP165 proposal
    - Trigger period
    - User Commitment Amount
    - User commitment in negative zones
    - Implementation and transition
    - Interaction with existing users
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### User Commitment Today

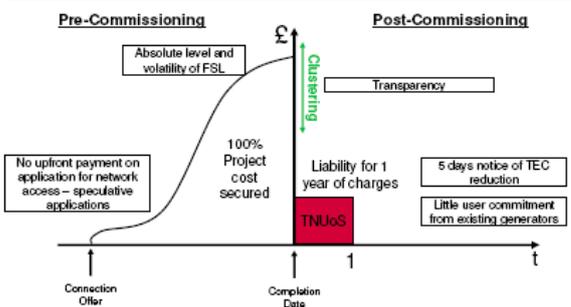
#### Issue / defect identified under CAP131 (1)

- Existing Final Sums arrangements have come under pressure due to BETTA transition and incentives for renewable generation
- The industry has given considerable thought to this area
  - National Grid's "Managing the GB Queue" consultation
  - Transmission Price Control Consultations
  - ARODG
- Issues / defects identified
  - arrangements for Final Sums are not transparently defined
  - level and volatility of final sums a barrier to entry
  - difficulties in network planning given volume of applications and uncertainty in power station closures

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### User Commitment Today

#### Issue / defect identified under CAP131 (2)



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### CAP131 Proposal

#### Principles for reform – simplify regime

- Develop a generic regime to apply to all applications for additional transmission access
  - Applicants know what liabilities will be incurred before application (transparency)
  - Liabilities fixed upon signature of construction agreement and/ or modification offer (certainty)
  - Meaningful up-front liability upon signature of construction agreement and/ or modification offer (addresses speculation)
- Trade-off between certainty and cost-reflectivity
  - On project termination there may be instances where a generic liability is greater or less than the project costs incurred

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### CAP131 Proposal

#### Principles for reform – enhance signals

- Rebalance risk of unnecessary transmission investment from new entrants to consumers
  - Is it appropriate for new users to bear 100% of investment costs?
  - Ofgem have signalled 100% may not be appropriate
  - What is the appropriate level?
    - We have assumed new users should cover 50% of investment costs
    - This lowers barriers to entry in the majority of cases
  - But new users should face a non-refundable termination charge
    - Real commitment
    - Balance of risk with consumer
- Market Information
  - Incentivise closure information provision
    - Avoids unnecessary transmission investment

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### CAP131 Proposal

#### Principles for reform – enshrine arrangements

- Formally define user commitment arrangements
  - New Section in the CUSC
  - Transparency

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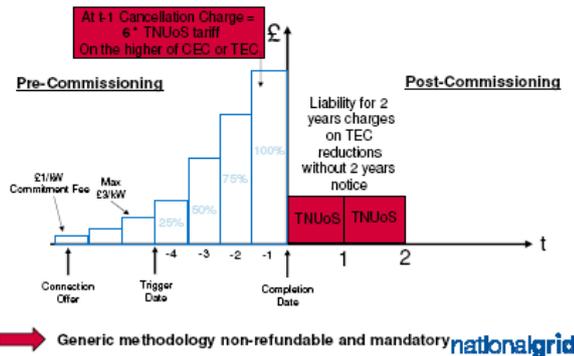
### CAP131 Proposal

#### High-level description (1)

- Enshrine generic user commitment methodology for new generators and incremental TEC requests
  - use Generation TNUoS tariffs as a proxy
  - in the full year before connection, 6 \* TEC \* Generation TNUoS would be required to be secured
  - subject to minimum Generation TNUoS tariff of £3/kW
- Incentive to provide earlier TEC reduction information
  - Existing users incentivised to provide 2 years notice of TEC reductions
  - Avoids liability for 2 times the modulus of generation TNUoS for the TEC reduction (subject to a minimum generation TNUoS tariff of £3/kW)

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### CAP131 Proposal High-level description (2)

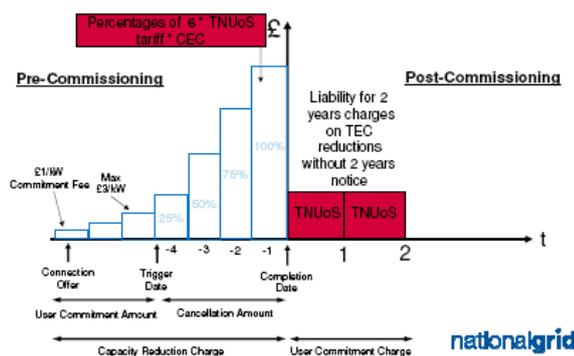


### CAP131 Proposal Terminology (1)

- User Commitment Amount
  - The annual (1, 2 or 3) £/kW amount of user commitment prior to the trigger date
- Cancellation Amount
  - The amount of user commitment during construction, as a percentage of six years' worth of TNUoS
- Capacity Reduction Charge
  - The charge levied if a generator reduces its required capacity (to zero or otherwise) prior to completion, based on whichever of the User Commitment Amount or Cancellation Amount is applicable
- User Commitment Charge
  - The charge levied if a generator reduces its required capacity (to zero or otherwise) post completion, without giving two full years' notice

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### CAP131 Proposal Terminology (2)



### CAP131 Proposal Security requirements

- Pre-commissioning
  - If the user has a credit rating of at least A-, no security would be required
  - If not, the user would have to secure the User Commitment Amount / Cancellation Amount
- Post-commissioning
  - No security required

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### CAP131 Proposal Advantages

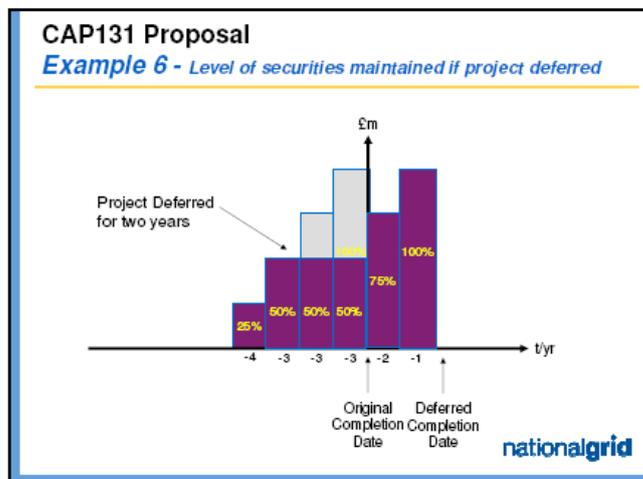
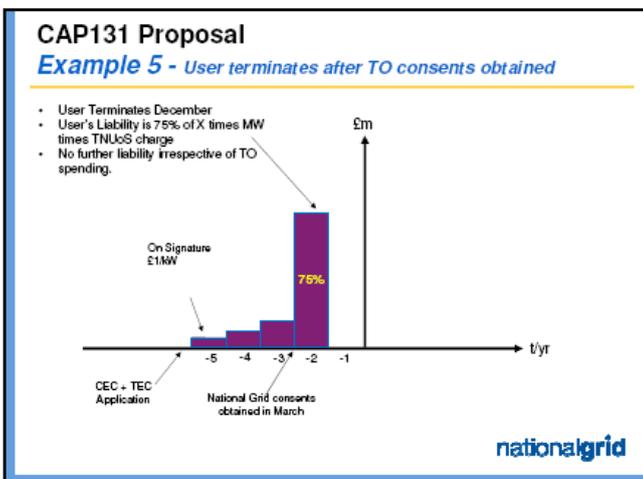
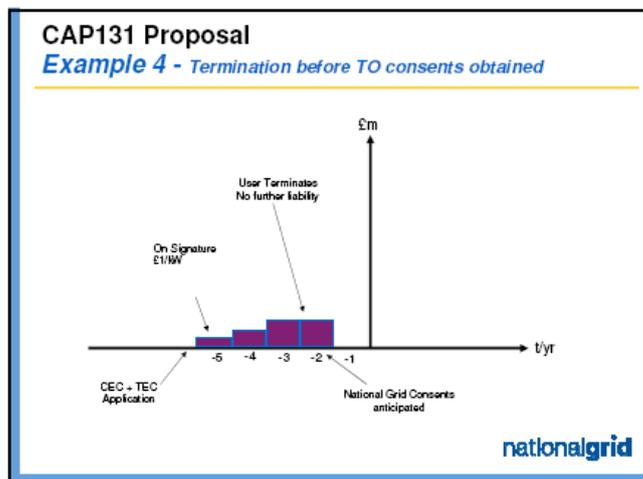
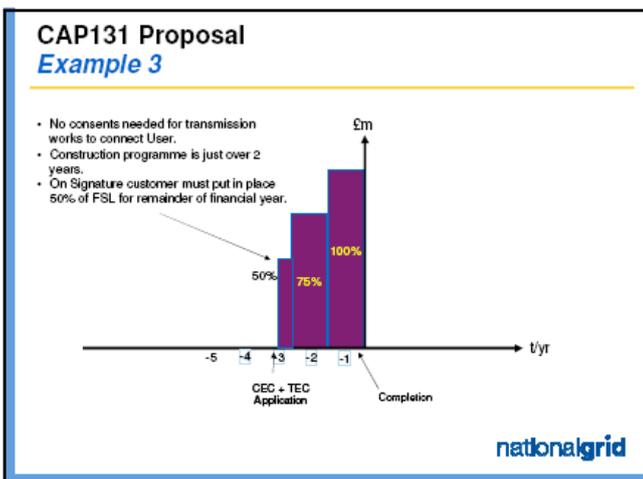
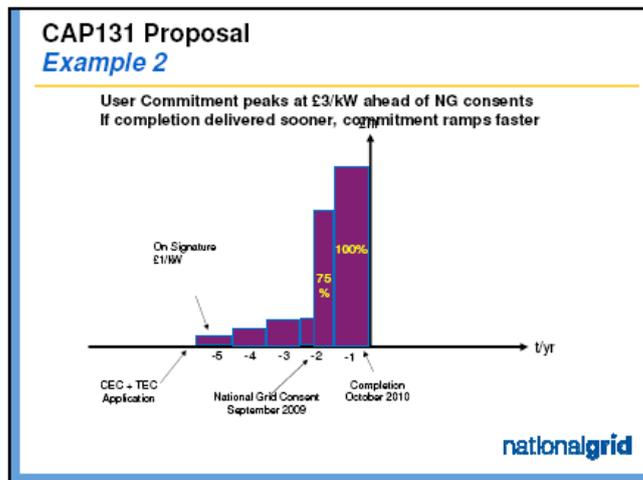
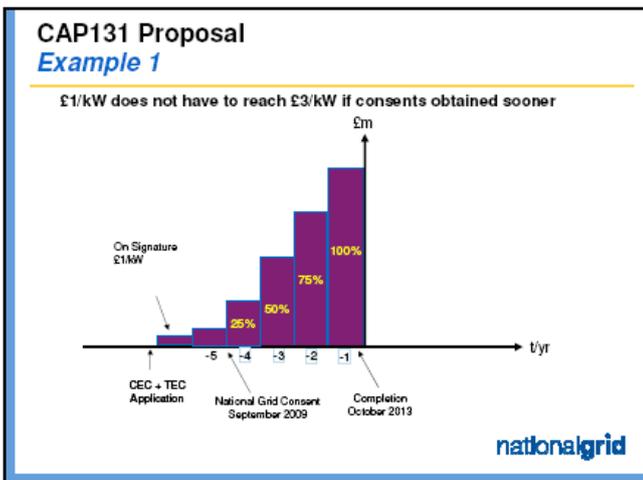
- Applicable to all applications for new generators and incremental TEC applications
  - liabilities will be known before application (transparency)
  - liabilities fixed upon signature of agreement (certainty)
  - up-front liability upon signature of agreement (speculation)
  - transfers risk from new entrants to consumers (level)
    - to balance this, cancellation charge should be non-refundable
- Application to existing generators
  - the provision of more accurate and earlier closure information will be incentivised
    - Will give better investment signals

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### CAP131 Proposal Justification against applicable objectives

- Efficient discharge of licence duties
- Enhanced signals / information facilitates efficient planning of the transmission system
- Facilitate effective competition in generation & supply
- Lowers barriers to entry
  - Reduces speculative applications
  - Greater transparency for Users

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## CAP165 Proposal

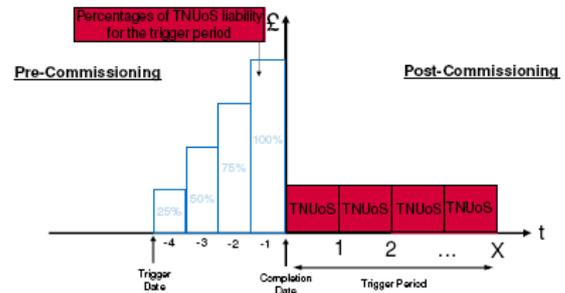
### Overview for incremental access rights (1)

- Concept is based on CAP131
- However, new generators would be booking a defined number of years of entry access rights ("the trigger period")
  - i.e. would be booking 6 years' worth of access to apply from the completion date, rather than just providing security based on 6 years' worth of TNUoS
- Still envisaged that this user commitment would be based on a 50% sharing factor
- Separate arrangements to be put in place for local infrastructure
  - i.e. this is only providing user commitment for wider access rights
- Account to be taken of changes to residual charge
  - Will need to recalculate length of trigger period

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## CAP165 Proposal

### Overview for incremental access rights (2)



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## CAP165 Proposal

### Trigger period liability

- Trigger period liability will be  $TEC \times TNUoS$  tariff in each of X years
- Need to determine whether TNUoS tariff is:
  - That prevailing at trigger date
  - Revised annually to that prevailing
    - On an ongoing basis
    - Up to Completion Date
  - Based on forecast future tariffs
    - Would better reflect impact of other developments
- User may choose to book longer than X years
  - At trigger date?
  - At completion date?

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## CAP165 Proposal

### Is the User Commitment Amount required?

- In CAP131, the purpose of the User Commitment Amount (the 1, 2 or 3 £/kW prior to the trigger date) was threefold:
  - To reflect the costs of local reinforcements in negative zones
  - To reflect the costs of obtaining consents and undertaking pre-engineering works
  - Minimum meaningful commitment to disincentivise unviable projects
- In CAP165:
  - Local reinforcement will be treated separately
  - Costs of obtaining consents and undertaking pre-engineering works – need to understand:
    - Local / wider split
    - Positive / negative split – see next slides
  - To disincentivise unviable projects
    - Could this be done through local?
      - will always be positive

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## CAP165 Proposal

### User commitment in negative zones (1)

- Based on existing charges, if the residual removed, all zones from the Midlands south would be negative
- How would user commitment be given in negative zones?
- In CAP131:
  - For incremental capacity, there would be a minimum "floor" of £3/kW
  - For existing capacity, the modulus of the tariff would be used, subject to a minimum of £3/kW
- Use of modulus justified as "biggest incentive for early notification of closures required at extremes of the network"

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## CAP165 Proposal

### User commitment in negative zones (2)

- Is a minimum required for incremental capacity in negative zones?
  - Only as a disincentive to unviable projects; or
  - If there were wider works
    - And for which there might be consents or pre-engineering costs?
- However, a requirement for wider works seems inconsistent with a negative tariff
  - Signalling that it would be beneficial to locate here
- Any requirement for wider works is likely to be a result of other new connections
  - Forecast future tariffs might be positive?

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### CAP165 Proposal

#### User commitment in negative zones (3)

- Is use of modulus justified for existing generation?
  - Closure of plant in very negative zones might lead to works on the system to support demand
    - But addresses a different defect?
    - Shouldn't be disincentivising connections in these areas?
  - In any event, incentive would be on plant not to close – just wouldn't generate for remainder of booking
    - Unless local connection charge higher than costs of terminating local connection and terminating wider rights?
    - Would physical evidence of availability be required?

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### CAP165 Proposal

#### Implementation and transition

- All pre-commissioning generators will be deemed to have booked entry rights equal to the trigger period
  - Option to book longer, but timing for transition will depend on whether enduring solution is to do this at application or completion
  - Security equal to liability for the trigger period will be required
    - As making a booking for use of system access, seems logical to deal with these in Section 3 of CUSC
      - Would use provisions based on Best Practice Guidelines
    - This may be a significant increase for Scottish transitional users who currently only have to secure intra-Scottish reinforcements
    - If implementation was a 1<sup>st</sup> April, would seem most logical to issue revised security requirement in January
      - Security would be put in place in February
      - But might want to review enduring processes?

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### CAP165 Proposal

#### Interaction with existing users (1)

- Under CAP165, both new and existing generators make long term bookings
  - Release of incremental capacity is subject to booking a minimum trigger period
  - If we accept 50% is the "right" risk sharing factor, then, although new generators could book entry rights for longer than the trigger period, would it be necessary for them to secure this?
- Previously, we have discussed security requirements for long term bookings made by existing generators
  - It has been suggested that one year would represent an appropriate amount of security to be lodged, irrespective of the length of the booking
    - Liabilities could be passed through in future years and smeared across all users (generators?)
    - Cost to industry of self insurance might be less than lodging security for lengthy multi-year bookings

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### CAP165 Proposal

#### Interaction with existing users (2)

- Example below is from Ofgem's CAP131 RIA
- Whilst Generator A provides 6\*TNuoS to cover cost of additional capacity, Generator B is liable for one year of TNuoS (and provides no security)
- Impact of Generator B closing would be equivalent to Generator A terminating close to completion
  - But no protection for customers

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### CAP165 Proposal

#### Interaction with existing users (3)

- Under CAP165:
  - Generator A would book at least the trigger period, and provide security for this
  - Generator B would also have a long term booking
- Is there a justification for Generator B providing less security than Generator A?
- Ofgem's CAP131 RIA speculates that certain existing generators may actually be more risky than some new entrants
  - E.g. "a coal plant opted out of LCPD with limited remaining running hours" compared to "a renewable wind farm with planning permission and financial backing of ROC mechanism"

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## Potential Proxies for Investment Costs

Transmission Access Working Group 2  
Meeting 3, 11<sup>th</sup> June 2008

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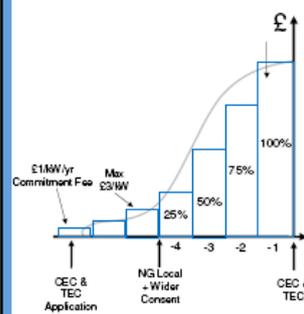
### Potential Proxies for Investment Costs

#### Agenda

- CAP131 Analysis
- Requirement for Further analysis
- New revenue drivers
- Analysis Issues
- Next Steps

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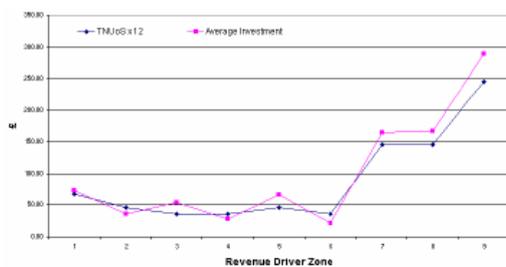
### CAP131 Analysis (1)



- Move from specific FSL to a generic proxy
- Increased predictability and stability
- Six x TNUoS
- Both locational and residual charge included
- Old TPCR revenue drivers to approximate investment

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### CAP131 Analysis (2)



- Risk shared 50:50 so 12 years TNUoS becomes 6 years
- £3/kW minimum charge

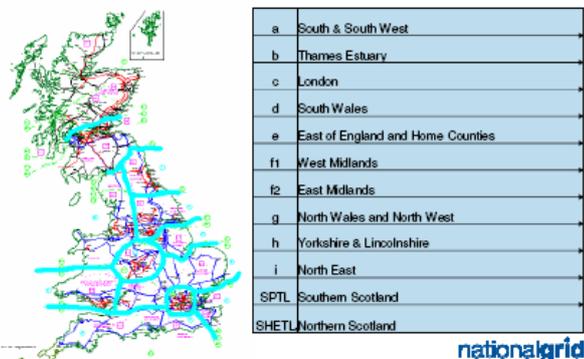
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### Further Analysis Required

- The analysis which led to 6 years TNUoS needs to be revisited to take into account the following changes:
  - Separation of the locational charge into local and wider
  - Commoditisation of the residual
  - Updated Revenue Driver zones
  - Updated TNUoS charges

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### New Revenue Driver Zones



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### New Investment Allowances



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## Analysis Issues

- Definition of local and wider
- Differences between Long-Run Marginal Costs and Incremental Investment
  - Extra Revenue Driver Zones
- Timing relative to Transmission Price Control Review
  - Cumulative incremental effects

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## Next Steps

- Consider potential proxies for investment
  - Current TNUoS \* X
    - Best fit Zones
    - Revenue Driver Zone Average
    - Revenue Driver Zone Weighted Average
    - Vary minimum charge
  - Forecast TNUoS \* X
  - Revenue Drivers
- Calculate local and wider TNUoS tariffs
  - Distance to zonal hub
  - Specific treatment
- Compare potential proxies
  - Cost reflectivity
  - Predictability
  - Transparency
- Choose appropriate proxy

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## Meeting Five – 9<sup>th</sup> July 2008

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# Transmission Access Review

**Ofgem presentation at TA Working Groups**  
**Stuart Cook**  
**Director - Transmission**

WG 1 - 8 July 2008  
WG2 - 9 July 2008  
WG3 - 16 July 2008

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## GB transmission network will need to connect a substantial volume of new generation

*Existing arrangements are not fit for purpose. Significant queue of generators waiting to connect. Transmission investment lags behind generation investment*

- The existing GB transmission system connects c80GW of generation to meet around 60-65GW peak demand
- To meet 2020 targets will require an **additional 60GW+** of renewable capacity plus:
  - thermal (fossil) back up plant given intermittency
  - new nuclear generation
  - around 20GW of existing generation is expected to close by 2020 and distributed generation will also have an impact
- Majority of new connections for **onshore and offshore wind**, but also **nuclear, gas and clean coal**. Connections may be remote from the existing network resulting in potential planning difficulties

*Longer term targets create major uncertainties and challenges for Ofgem, HMG and companies. This isn't just a renewables issue. Need for radical reform and innovation.*

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## Ofgem's key principles for enduring transmission access arrangements

- Protecting customers' interest** through reform is vital
  - Long term user commitment from generators is key – avoids transfer of stranding risk to customers and improve the quality of information of future demand for transmission capacity
- Existing generators **do not have "evergreen" rights** to the system (but we are open to "legal" arguments)
- It is important to have **long-term tradable rights**
  - Users can sell rights on a permanent or temporary basis allowing lower carbon technologies to displace existing and reallocation of spare capacity
- Overselling capacity/connect and manage** not ruled out can be considered, based on proper assessment of costs (eg constraints) and benefits (eg lower carbon emissions)

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## The TAR package

*Enduring access arrangements*

- Amendment proposals on commercial arrangements and charging methodology
- Modular approach, capable of delivering a range of different regimes
- Possible implementation around April 2010

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## The TAR package

*Enduring access arrangements*

- Amendment proposals on commercial arrangements and charging methodology
- Modular approach, capable of delivering a range of different regimes
- Possible implementation around April 2010

*Short term measures (a form of "connect & manage")*

- Improving management of existing "queue" of generators
- Measures to release and utilise the full capacity of the system
- Scope to connect more generation through limited derogations from security standards? Criteria include: Benefits > Costs.
- Concerns about market power? Incumbents wanting to advance generation projects asked to auction existing capacity?

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## The TAR package

*Enduring access arrangements*

- Amendment proposals on commercial arrangements and charging methodology
- Modular approach, capable of delivering a range of different regimes
- Possible implementation around April 2010

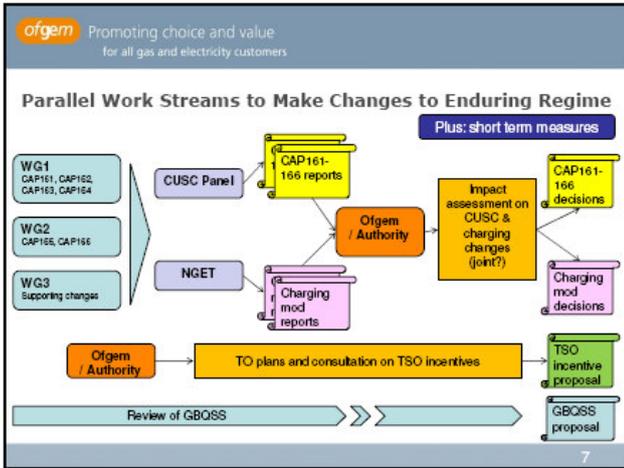
*Short term measures (a form of "connect & manage")*

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- Measures to release and utilise the full capacity of the system
- Scope to connect more generation through limited derogations from security standards? Criteria include: Benefits > Costs.
- Concerns about market power? Incumbents wanting to advance generation projects asked to auction existing capacity?

*Planning & Incentives*

- TSOs to publish a major technical study by end of 2008. Brought together through ENSG
- Ofgem to develop sharper incentives for TSOs, in particular, new investment incentives for TOs to take some of stranding risk (but with higher reward for timely & efficient investment)
- Linked to ongoing review of SO incentives

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### Our expectations (enduring arrangements)

- WGs are expected to:
  - Consider linkages (eg mutual dependency/enhancement/exclusion) between proposals, bearing in mind the over-arching framework to be established
  - Develop, assess and report on evidence (wherever possible, quantitative) for a manageable number of viable options
  - Be mindful of CUSC and other obligations (e.g. prohibition on undue discrimination)
- CUSC Panel is expected to:
  - Consider WG reports. Submit report to the Authority setting out assessment of options and a recommended option for each CUSC amendment proposal
  - Be mindful of CUSC and other obligations (e.g. prohibition on undue discrimination)
- NGET is expected to:
  - Consult on charging options arising from WGs
  - Submit report to the Authority setting out assessment of options and charging modification proposals
- Ofgem/Authority is expected to:
  - Provide an appropriate steer on analysis and direction
  - Conduct Impact Assessment(s) on proposals, leading to decision on changes

**Authority to report on progress to the Secretary of State by end-2008. Government will consider legislation in the event of delay or resistance.**

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### Some initial observations on current topics of debate

- Our starting point: the regime should permit non-physical players to acquire and trade capacity
  - Limiting to physical players will restrict market activity
  - We consider that it works in gas but, would need to be coupled with effective UIOLI, etc
- In general, auctions provide the most effective way of allocating scarce capacity. Happy to consider views about the merits of an auction-based approach for the non-short-term capacity. But, some questions:
  - Need to ensure that the short-term and non-short-term arrangements 'hang together'
  - Alternative approaches (e.g. administered price) may not afford the flexibility, for example, to allow parties to signal both volume and prices
  - We will need to see an informed assessment of the merits of alternative options.
- Credit cover - do we need to distinguish between Value at Risk (VAR) and the risk of party default?
  - Value at risk - will depend on: the extent to which the relevant assets can be used now or in the future by a different party
  - The risk of party default - will depend on the particular circumstances of the party

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## CAP165 Actions from Meeting 3

Transmission Access Working Group 2  
Meeting 5, 9<sup>th</sup> July 2008

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## CAP165 Analysis

### Agenda

- ◆ Fixed Tariffs
  - Scenarios
  - Fixing the Locational Only
  - Fixing the Total Tariff
- ◆ Post-Commissioning Security

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## Fixed Tariff Scenarios

	2006/07 Tariffs		Forecast 2008/09 Tariffs	
	Locational	Total	Locational	Total
All Fix	£1.03/MWh	Under recovery £61 million	£0.98/MWh	Under recovery £64million
All Float	£0.98/MWh	NO under or over recovery £4.11/kW	£0.98/MWh	NO under or over recovery £4.11/kW
Mixture	£1.06/MWh	additional £0.31/kW	£1.01/MWh	additional £5.18/kW

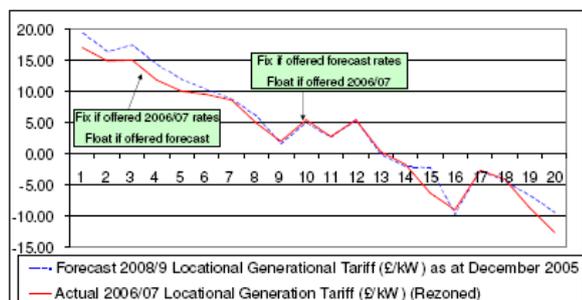
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## Fixing the Locational Tariff Only

- In the majority of zones the 2006/07 tariff is lower than the actual 2008/09 tariff. Fixing at 2006/07 levels decreases amount recovered from the locational tariff so increases the residual tariff.
- Fixing at forecast 2008/09 levels has a minimal effect on the residual because the zones where the forecast tariff is lower than the predicted tariff are cancelled out by some zones with much capacity having slightly higher tariffs.
- Where the generator can choose whether to fix or float the locational tariffs are lower or equal to the 2008/09 tariffs so the amount recovered from the locational is lower so the residual is greater than if everyone floated.

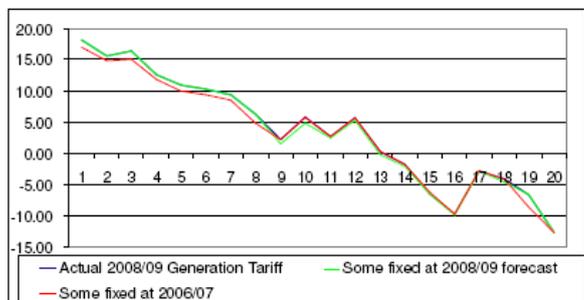
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## Fix or float?



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## Mixed Tariffs



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## Meeting Six – 28<sup>th</sup> July 2008



Inclusion of Non-physical Parties in Long-term Electricity Access Arrangements

Transmission Access WG 2 – 6<sup>th</sup> Meeting  
NGC House – Warwick 28<sup>th</sup> July 2008

Dr. Nicholas F Hyndes  
Director of Regulatory Affairs  
MCE Ltd



### Inclusion of non Physical Market Players (i)

- Two distinctly different issues:
  - Ownership of Title of an Asset (Physical)
  - Control over the **Economic Interest** of an Asset (maybe non-Physical)
- More players, Liquidity, Competition, Appropriate economic & **investment** signal
- More competitive **Generation Market** with variety of contractual forms
- Trading increases the overall Social Benefit - Optimisation

### Inclusion of non Physical Market Players (ii)

- Firm Financial Commitments for all bidders
- Gaming overplayed - can be prevented by anti-hoarding measures  
"Physical" players are allowed to undertake speculative transactions,  
Non-Physical can enter the Capacity Rights Market through a "sleeve" agreement
- Exclusion has the burden of proof

## CAP165: Charges for Finite Rights Strawman

Transmission Access Working Group 2  
Meeting 6, 28<sup>th</sup> July 2008

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## Why have a Fixed locational TNUoS tariff

- ◆ A user providing a long term signal should have improved tariff certainty
- ◆ Fixing the locational tariff would improve the stability and predictability of the charge

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## Fixed Tariffs

- ◆ The local and the wider section of the locational part of TNUoS would be fixed using new local charging arrangements
- ◆ The residual part of the TNUoS tariffs would float according to the new residual charging arrangements
- ◆ Interaction with working group three

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## Cost reflectivity Vs Certainty

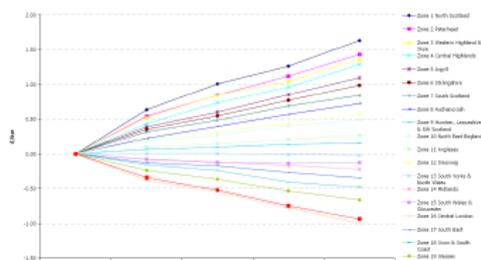
- ◆ The choice between fixing and floating the charge gives a choice between cost reflectivity and certainty

	Cost reflective	Certain
Fixed (at charge at time of connection)	✗ Only cost reflective in 1 <sup>st</sup> year	✓
Fixed (at forecast)	✓ up to 5 Years	✓
Floating	✓ ✓	✗

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## Retail Price Index

- ◆ Currently MAR (between price controls) and the expansion constant are linked to RPI
- ◆ Effect of RPI on National Grid five year forecast:



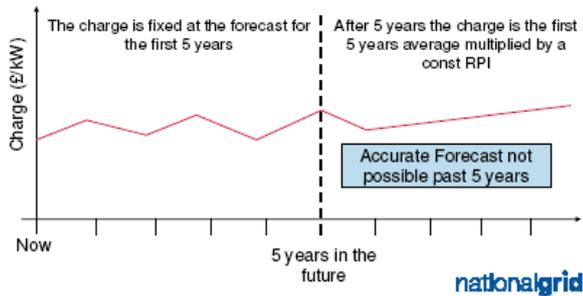
## Retail Price Index

- ◆ Advantages
  - ◆ Increases locational signal in line with RPI
  - ◆ Ignoring the effect of inflation could give an incentive to over book capacity
  - ◆ Disadvantage new users
- ◆ Disadvantages
  - ◆ Difficult to predict

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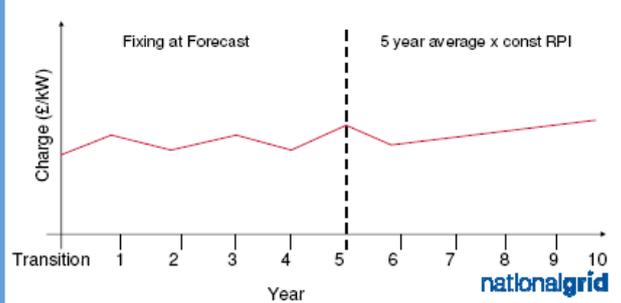
## Strawman

- The locational charges is fixed for the duration of the booking



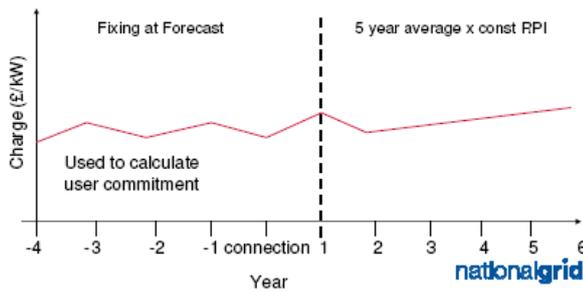
## Timing

- Existing users fix their charges at transition



## Timing

- New users fix their charges four years in advance of connection date



## Fixed Strawman Vs Floating

Fixed Strawman	Floating
<ul style="list-style-type: none"> <li>Gives users increased certainty</li> </ul>	<ul style="list-style-type: none"> <li>Charges are uncertain</li> </ul>
<ul style="list-style-type: none"> <li>Emphasises the locational signal given in the first five years but ignores the future</li> </ul>	<ul style="list-style-type: none"> <li>Gives locational signal throughout booking</li> </ul>
<ul style="list-style-type: none"> <li>Quite cost reflective for first five years, not very cost reflective after. Creates cross subsidies.</li> </ul>	<ul style="list-style-type: none"> <li>Cost reflective</li> </ul>
<ul style="list-style-type: none"> <li>Restricts future changes to the charging methodology</li> </ul>	<ul style="list-style-type: none"> <li>Flexible to future methodology changes</li> </ul>

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# Observations on the Nature of Access Rights

28 July 08

Stuart Cook  
Director - Transmission

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## Factors which will guide our thinking if we asked to decide on "access rights"

**Our primary duty** - "to protect the interests of consumers, present and future, wherever appropriate by promoting effective competition".

In no particular order, we will consider factors including the need to:

- Contribute to the achievement of **sustainable development**
- **Security of supply** - secure a diverse and viable long-term energy supply.
- Be sensitive to **expectations** of licence holders
- **Avoid undue discrimination**
- Reflect **legal constraints**

**The move from the MCUSA to CUSC opened the possibility for change**

CAP043 - Transmission Access (Definition) (2003) - When parties become CUSC signatories this is on the basis that the CUSC can be subject to change following due process

**We are open to views which are legally robust and consistent with our duties**

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## There are circumstances where it is unlikely to be appropriate to change "access rights"

**In the case of future rights ...**

Where parties have made a non-reversible financial commitment, and where a change in rights might:

- Undermine sustainable development
- Undermine security of supply
- Conflict with the expectations of licence holders
- Result in undue discrimination
- Be open to legal challenge

➔ **Enduring Access Arrangements**

We will work to make the enduring access arrangements as "future proof" as possible (recognising that HMG and European policy can change)

**But, currently, we do not believe these factors apply to so called "evergreen" rights**

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## We have long considered rights under the CUSC to be unclear . . .

- **Transmission access and losses under NETA (2001)** - A further concern is that rights made available to participants to use the transmission system (access rights) are **not well-defined**
- **TPCR4 Third Consultation (2006)** - we would prefer to move towards a system which...**clearly defines** the access rights that users will receive
- **CAP142 - Temporary TEC exchanges (2007)** - We therefore think that it is important to question **whether the rights and obligations associated with existing access products are sufficiently well defined** to allow the development of a well-functioning traded market
- **TAR Call for Evidence (2007)** - it is not obvious that the industry codes provide a **clear definition** of the rights associated with TEC and that it may be inappropriate for TEC holders to consider they hold an enduring property right to use the transmission system

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## . . . there are features of the existing rights which suggest they are not "evergreen" . . .

**There is no matching of rights and obligations - financial commitment is not aligned with the longevity of the underlying investment**

- Users are only required to commit to one year of liabilities
- Users can decrease TEC not less than five business days prior to the 30 March (CUSC, §5.6)
- Users are only required to give six months notice before disconnection CUSC (CUSC, §6.3)
- No scope for meaningful trading of future TEC

**What Ofgem has said in the past**

- **Transmission access and losses under NETA (2001)** - rights to be traded must be defined in a way which ensures that ... reflects the **temporal and spatial nature of transmission constraints**.
- **CAP043 - Transmission Access (Definition) (2003)** - TEC defines a generator's maximum allowed export onto the System **in a financial year**.
- **CAP068 - Competing requests for TEC (2004)** - Ofgem considers that the existing first come first served mechanism for TEC applications and the granting of the same level of access right to a party **in the subsequent year** once TEC is purchased ...
- **TAR Seminar (2008)** - Existing generators **do not have "evergreen" rights** to the system

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## . . . and "evergreen rights" do not appear consistent with wider policy interests

- Existing arrangements appear to favour incumbents over new entrants
  - Can act to inhibit new, unrelated generation
  - When times are good incumbents benefit, when bad they can simply hand back rights or mothball to save money
- If rights are enduring, how long do they last?
  - LCPD opted-out plant?
  - Decommissioned nuclear plant?
- Scope for plant to jump the queue by securing an extension

**We are open to views which are legally robust and consistent with our duties**

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## Meeting Seven – 7<sup>th</sup> August 2008

### CAP165: Proxies for Investment Costs

Transmission Access Working Group 2  
Meeting 7, 7<sup>th</sup> August 2008

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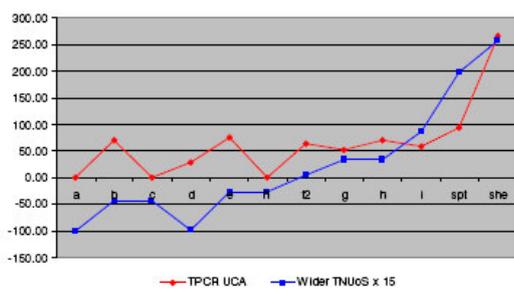
### Background

- CAP131 used 6 x TNUoS as a proxy to secure investment
- CAP165 requires a proxy to secure wider investment
- WG3's work has split TNUoS into local, wider and residual components

Is X x wider TNUoS a good proxy for wider investment?

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### Wider TNUoS Vs Wider Revenue Drivers



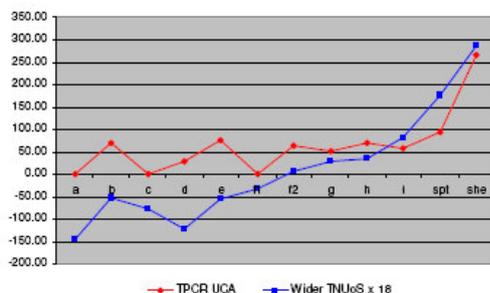
Average: 15 Standard Deviation: 52

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### Wider TNUoS Vs Revenue Drivers

Revenue Driver Zone	Best Fit TNUoS Zone	Wider Revenue Driver	Wider TNUoS Charge
A	19	0.00	-6.63
B	17	70.00	-2.83
C	17	0.00	-2.83
D	15	29.20	-6.57
E	14	75.80	-1.69
F1	14	0.00	-1.69
F2	13	64.10	0.39
G	9	52.50	2.23
H	9	70.00	2.23
I	10	58.30	5.79
SPT	7	94.44	13.13
SHTL	1	266.90	17.87

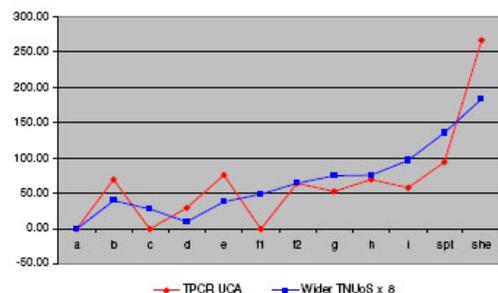
### Re-zoned Wider TNUoS Vs Wider Revenue Drivers



Average: 18 Standard Deviation: 50

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### Re-zeroed Wider TNUoS Vs Wider Revenue Drivers



Average: 8 Standard Deviation: 7

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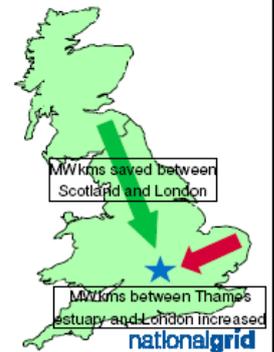
### TNUoS as a Proxy for Investment

INVESTMENT	TNUoS
Incremental cost	Long run marginal cost
Future reinforcement	Current circuits
Lumpy	Smooth
Gross	Net
Absolute	27:73
Revenue driver local and wider split	Local charging local and wider split
Non locational assets included	Locational wider assets only

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### TNUoS vs UCAs Thames estuary example

- Overall impact of +1MW in Thames estuary is fewer MWkm
  - Negative locational TNUoS charge
- But, UCA is £70/kW [capital]
  - Cost of reinforcement between Thames estuary and London
- These reinforcements are at risk of stranding if the generator disappears



### Conclusion

- Wider TNUoS is not a very good proxy to secure wider investment
- Rezeroing (or adding residual) improves proxy
- Could we use Revenue Drivers instead?
  - Transparency
  - Scotland

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### CAP165 – UCA Based Alternative

*Transmission Access Working Group 2  
Meeting 7, 7<sup>th</sup> August 2008*

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### CAP165 – UCA Based Alternative *Strawman – pre-commissioning*

- Pre-commissioning termination charge would be based directly on 50% of the relevant UCA
- Would be profiled 25/50/75/100% over 4 years prior to commissioning
- Security would be held based on this
- Users could book any access period to apply after commissioning

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### CAP165 – UCA Based Alternative *Strawman – post-commissioning*

- Users can book any access period
- Users are liable for charge for remaining period of booking
- Termination charge is the higher of this liability and a risk based amount derived from the age of plant and period of booking
  - Defined as a proportion of (50% of) the UCA
  - Security would be provided for this
  - Would vary for technology?
- In positive charging zones, risk based amount could be set approximately consistent with liability for remaining booking
- But in negative charging zones with positive UCAs would need a test to determine closure and therefore incur termination charge

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## CAP165 - User commitment amount and process

Transmission Access Working Group 2  
Meeting 7, 7<sup>th</sup> August 2008

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## CAP165 - User commitment amount and process Agenda

- ♦ User commitment today
- ♦ CAP131 proposal
- ♦ CAP165 proposal
  - Trigger period
  - User Commitment Amount
  - User commitment in negative zones
  - Implementation and transition
  - Interaction with existing users

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## CAP165 Proposal

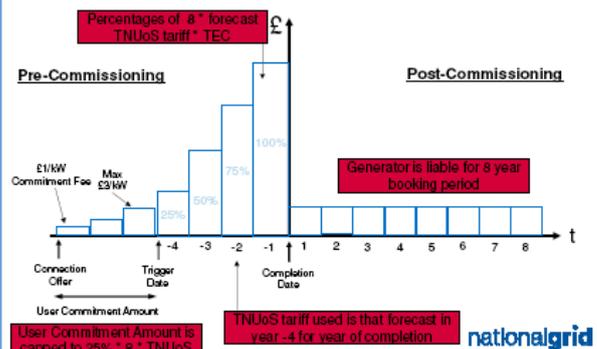
### Overview for incremental access rights (1)

- Concept is based on CAP131
- However, new generators would be booking a defined number of years of entry access rights
  - i.e. under CAP165 would be booking 8 years' worth of access to apply from the completion date, rather than just providing security based on 6 years' worth of TNUoS as under CAP165
- This user commitment is still based on a 50% sharing factor
- Separate arrangements to be put in place for local infrastructure
  - i.e. this is only providing user commitment for wider access rights
- Now only based on locational element of tariff
  - i.e. excludes residual

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## CAP165 Proposal

### Overview for incremental access rights (2)



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## CAP165 Proposal

### User Commitment Amount

- In CAP131, the purpose of the User Commitment Amount (the 1, 2 or 3 £/kW prior to the trigger date) was threefold:
  - To reflect the costs of local reinforcements in negative zones
  - To reflect the costs of obtaining consents and undertaking pre-engineering works, such as environmental studies
  - Minimum meaningful commitment to disincentivise unviable projects
- In CAP165, local reinforcement will be treated separately but still a requirement/rationale for the other two drivers

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## CAP165 Proposal

### Use of forecast tariffs

- In CAP131, the prevailing tariff at time of offer was used
- This gave certainty, but was not cost reflective
- Imagine a currently negative

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### CAP165 Proposal

#### *Process for incremental access rights*

1. Applicant applies for wider access rights.
2. GBSO processes application, liaises with Scottish TOs (if required) and produces offer. Offer defines completion date and (if applicable) the trigger date.
3. Where there is a trigger date

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### CAP165 Proposal

#### *User commitment in negative zones (1)*

- Based on existing charges, if the residual removed, all zones from the Midlands south would be negative
- How would user commitment be given in negative zones?
- In CAP131:
  - For incremental capacity, there would be a minimum "floor" of £3/kW
  - For existing capacity, the modulus of the tariff would be used, subject to a minimum of £3/kW
- Use of modulus justified as "biggest incentive for early notification of closures required at extremes of the network"

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### CAP165 Proposal

#### *User commitment in negative zones (2)*

- Is a minimum required for incremental capacity in negative zones?
  - Only as a disincentive to unviable projects; or
  - If there were wider works
    - And for which there might be consents or pre-engineering costs?
- However, a requirement for wider works seems inconsistent with a negative tariff
  - Signalling that it would be beneficial to locate here
- Any requirement for wider works is likely to be a result of other new connections
  - Forecast future tariffs might be positive?

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### CAP165 Proposal

#### *User commitment in negative zones (3)*

- Is use of modulus justified for existing generation?
  - Closure of plant in very negative zones might lead to works on the system to support demand
    - But addresses a different defect?
    - Shouldn't be disincentivising connections in these areas?
  - In any event, incentive would be on plant not to close – just wouldn't generate for remainder of booking
    - Unless local connection charge higher than costs of terminating local connection and terminating wider rights?
    - Would physical evidence of availability be required?

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### CAP165 Proposal

#### *Implementation and transition*

- All pre-commissioning generators will be deemed to have booked entry rights equal to the trigger period
  - Option to book longer, but timing for transition will depend on whether enduring solution is to do this at application or completion
  - Security equal to liability for the trigger period will be required
    - As making a booking for use of system access, seems logical to deal with these in Section 3 of CUSC
      - Would use provisions based on Best Practice Guidelines
    - This may be a significant increase for Scottish transitional users who currently only have to secure intra-Scottish reinforcements
    - If implementation was a 1<sup>st</sup> April, would seem most logical to issue revised security requirement in January
      - Security would be put in place in February
      - But might want to review enduring processes?

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### CAP165 Proposal

#### *Interaction with existing users (1)*

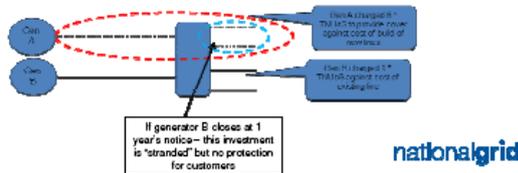
- Under CAP165, both new and existing generators make long term bookings
  - Release of incremental capacity is subject to booking a minimum trigger period
  - If we accept 50% is the "right" risk sharing factor, then, although new generators could book entry rights for longer than the trigger period, would it be necessary for them to secure this?
- Previously, we have discussed security requirements for long term bookings made by existing generators
  - It has been suggested that one year would represent an appropriate amount of security to be lodged, irrespective of the length of the booking
    - Liabilities could be passed through in future years and smeared across all users (generators?)
    - Cost to industry of self insurance might be less than lodging security for lengthy multi-year bookings

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### CAP165 Proposal

#### Interaction with existing users (2)

- Example below is from Ofgem's CAP131 RIA
- Whilst Generator A provides 6\* TNUoS to cover cost of additional capacity, Generator B is liable for one year of TNUoS (and provides no security)
- Impact of Generator B closing would be equivalent to Generator A terminating close to completion
  - But no protection for customers



### CAP165 Proposal

#### Interaction with existing users (3)

- Under CAP165:
  - Generator A would book at least the trigger period, and provide security for this
  - Generator B would also have a long term booking
- Is there a justification for Generator B providing less security than Generator A?
- Ofgem's CAP131 RIA speculates that certain existing generators may actually be more risky than some new entrants
  - E.g. "a coal plant opted out of LCPD with limited remaining running hours" compared to "a renewable wind farm with planning permission and financial backing of ROC mechanism"

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## Meeting Eight – 21<sup>st</sup> August 2008

### CAP165 – UCA Based Alternative

Transmission Access Working Group 2  
Meeting 8, 21<sup>st</sup> August 2008

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### CAP165 – UCA Based Alternative *Agenda*

- Rationale for alternative
- Pre-commissioning user commitment
- Post-commissioning user commitment
- Utilisation test
- Post-commissioning security

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### CAP165 – UCA Based Alternative *Rationale*

- Wider locational TNUoS proved not to be a good proxy for investment costs
  - Use UCAs directly for pre-commissioning user commitment
- Risks associated with post-commissioning generators:
  - System is not used sufficiently that initial transmission investment is deemed to have been efficiently incurred
  - Closure whilst reinforcement for additional generation is being constructed, thereby stranding that investment
- Therefore, post-commissioning user commitment also needs to be reflective of investment costs
- A good example is Thames Estuary
  - Wider locational TNUoS charge is -£2.83/kW
  - UCA is £70/kW

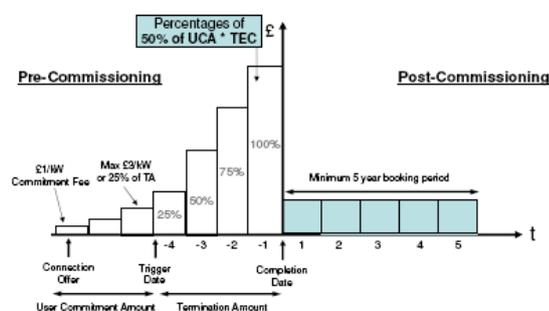
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### CAP165 – UCA Based Alternative *Pre-commissioning user commitment*

- Pre-commissioning termination charge would be based directly on 50% of the relevant UCA ("termination amount")
- Termination amount would be profiled 25/50/75/100% over 4 years prior to commissioning
- A £1/2/3/kW user commitment amount would apply before this (capped to 25% of the termination amount)
  - Covers pre-engineering and consents costs
  - Disincentivises speculative applications
- Security would be held based on these user commitment and termination amounts
- Users would have to book a minimum 5 years access period to apply after commissioning

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### CAP165 – UCA Based Alternative *Pre-commissioning user commitment (2)*



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### CAP165 – UCA Based Alternative *Post-commissioning user commitment*

- Initial 5 year minimum booking period
- Otherwise, any period of booking (in whole financial years)
- Generators liable to pay (or be paid) TNUoS charges for entire booking while using, or deemed to be using, rights
- If they wished to terminate, or were deemed to have terminated, their booking, they would face a termination fee based on the termination amount, profiled as follows:
 

• Year -4 (and before)	100%
• Year -3	75%
• Year -2	50%
• Year -1	25%
• Year 0	0%

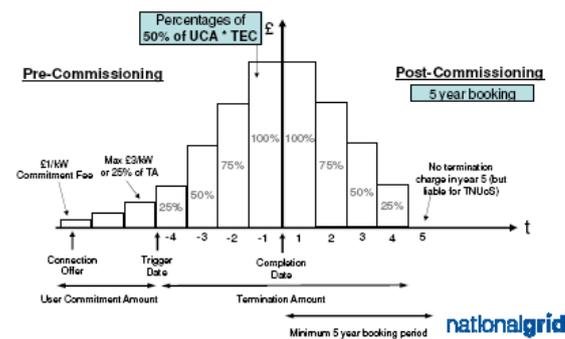
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### CAP165 – UCA Based Alternative Post-commissioning user commitment (2)

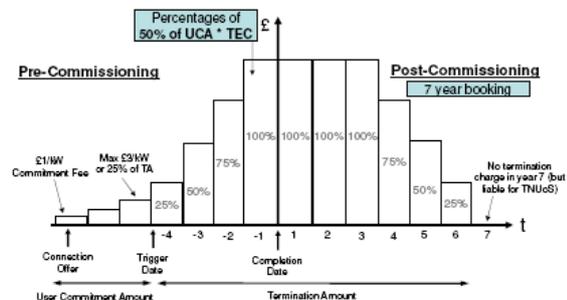
- If a generator wished to terminate in the last year of the booking, it would still be liable for TNUoS charges in that year, but would have effectively completed the booking
  - A termination charge would not be incurred on a 1 year booking
- If the generator were to terminate in the previous year, would not face TNUoS charge for final year of booking, but would instead be liable for the termination charge (in this case, 25% of the termination amount)
- If a generator were to terminate with 5 years to run, the termination fee would be the whole termination amount

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### CAP165 – UCA Based Alternative Post-commissioning user commitment (3)



### CAP165 – UCA Based Alternative Post-commissioning user commitment (4)



### CAP165 – UCA Based Alternative Post-commissioning commitment - justification

- Assume investment deemed to be 100% efficiently incurred if used for 5 years (based on price control duration)
- Therefore, minimum booking period of 5 years
  - Termination charge ramps down, reflecting the increasing proportion of the period that the rights have been used
- For longer bookings, termination charge must be 100% of termination amount until 5 years from end of booking
  - Would ensure that there is always commitment present equal to a 5 year booking or full termination amount when any investment undertaken to provide capacity for additional generation

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### CAP165 – UCA Based Alternative Utilisation test

- In most cases, 25% of the termination amount will be greater than a year's worth of TNUoS
  - In negative charging zones and many positive zones
- Rather than close, generators would let booking run its course
- Therefore, utilisation test required
- Could just be based on generating once in financial year
  - Less onerous than proving period in negative zones
- A certain proportion of TEC would need to be achieved
- Appeals process for generators on outage for more than a year?
  - But more appropriate than a test which doesn't require generation each year?

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### CAP165 – UCA Based Alternative Post-commissioning security

- Post-commissioning termination charges would only be secured for generators over a certain age, or when booking is long enough to take them over this threshold
  - This would be defined on a technology specific basis
- An appeals process might be required?
  - Could include an independent risk assessment?

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**CAP165 Alternative Approach**  
Pre- and Post-Commissioning User Commitment  
21 August 2008  
Any queries, please contact Stuart Collin (Drax Power) or Rob Rome (BE)



### User Commitment

- ▶ Different problems require different solutions
  - ▶ **Pre-Commissioning:**
    - ▶ User commitment demonstrated by investment in the asset
    - ▶ Once commissioned, we would expect maximum utilisation of the asset
    - ▶ No short term issues for National Grid or the generator
  - ▶ **Post-Commissioning:**
    - ▶ User commitment becomes problematic at the end of the asset's life
    - ▶ Generator must base its decision on market signals
    - ▶ National Grid seeks more certain investment signals and closure signals

### Issues to Address I

- ▶ Generators base their investment decisions on a number of factors including:
  - ▶ Input costs (fuel, carbon, Capex, fixed costs, etc...)
  - ▶ Revenues (power, ROCs, etc...)
  - ▶ Transmission access costs (TNUoS)
  - ▶ Changes in legislation (e.g. environmental)
- ▶ Transmission Owners base their decisions on different factors:
  - ▶ Investment in the network has to match the generation asset's life
  - ▶ There may be a mismatch between transmission investment signals and plant closure signals (made uncertain by wholesale energy prices) creating stranded assets which do not:
    - ▶ Earn revenue in the price control
    - ▶ Contribute to the efficient running of the network
    - ▶ Facilitate a competitive energy market

### Issues to Address II

- ▶ **Underlying Issues**
  - ▶ Inherently difficult to reconcile interests of generators and the transmission network
  - ▶ It is difficult to hypothecate a cost for shared assets the "deeper" into the network you go
  - ▶ Local charges can be more easily targeted than deep charges
  - ▶ It may be that there is an intermediate class of network which is not deep or local as it is only partially made redundant by a particular generation asset closure
- ▶ **Assumptions**
  - ▶ Both sides have time sensitivity issues
  - ▶ It is in the interests of both sides to provide as much certainty as possible
  - ▶ Need to consider the interests of future investors in generation
- ▶ The aim of this proposal is to find a compromise
  - ▶ Appropriate investment signals and more clear closure signals for National Grid
  - ▶ Increase in commitment from post-commissioning generators
  - ▶ Certainty of access for all types of generators / investors
  - ▶ To work with flexible short-term mechanisms

### Proposed Structure – Pre-Commissioning

- ▶ Use National Grid's UCA Based Alternative methodology
  - ▶ 50% of the relevant zonal UCA
    - ▶ Profitted 25/50/75/100% over the four years prior to completion
    - ▶ This would be secured
  - ▶ **User Commitment Amount**
    - ▶ Profitted £1/£2/£3/kW
    - ▶ Incurred in the three years prior to this
    - ▶ To capture pre-engineering and consent costs
- ▶ Open to suggestions...

### Proposed Structure – Post-Commissioning I

- ▶ Industry must decide on the length of a pre-defined "Commitment Period" that:
  - Allows generators to respond to market conditions; and
  - Provides National Grid with adequate closure signals
- ▶ Setting the length of the Commitment Period
  - ▶ Based upon National Grid investment cycles and reasonable generation closure schedules
  - ▶ UK power market liquidity would suggest a 2-3 year Commitment Period
  - ▶ National Grid's pre-commissioning UCA Based Alternative would suggest a 4 year Commitment Period
  - ▶ This should be a compromise to share the risk between the Users and National Grid, although it should be whole financial years
  - ▶ For this example, lets assume the Commitment Period is 3 years
- ▶ Each year (by the "Commitment Date"), each User informs grid (via a "Commitment Notice") that they shall be there for the Commitment Period
  - ▶ National Grid can be certain that:
    - ▶ Each User that submits a Commitment Notice is guaranteed to be there for 3 years
    - ▶ NG shall receive a relevant user commitment from each User, each year
    - ▶ NG now have a signal that further investment is viable in a given area, as required

## Proposed Structure – Post-Commissioning II

- ▶ A User may decide not to submit a Commitment Notice
  - ▶ In this circumstance, National Grid can assume that the User shall remain on the system until the date specified by the previous Commitment Notice received, for example:
    - ▶ User submits a notice year beginning Apr 2008: User has committed until Mar 2011
    - ▶ User submits a notice year beginning Apr 2009: User has committed until Mar 2012
    - ▶ User does not submit a notice year beginning Apr 2010: User remains committed until Mar 2012 (the 2 years remaining from the last Commitment Notice)
    - ▶ User must pay the relevant commitment each year, up to and including the period ending Mar 2012
  - ▶ At the end of the Notice period, the User relinquishes their access rights and must reapply for a connection if they wish to reconnect to the system.
- ▶ What if the User wants to leave early?
  - ▶ The User can terminate early at any time, provided that the user pays National Grid the greater of:
    - ▶ The commitment for the period of the latest Commitment Notice submitted by the User; and
    - ▶ Zero
  - ▶ At the end of the Notice period, the User relinquishes their access rights and must reapply for a connection if they wish to reconnect to the system.

7

## Benefits of the Proposal

- ▶ National Grid
  - ▶ Provides greater signals for plant closure (capacity release)
    - ▶ Therefore providing efficient investment signals for the network
  - ▶ Provides certainty of receiving the relevant commitment for the Commitment Period
  - ▶ Facilitates a consistent definition of TEC property rights in the CUSC
- ▶ Generators
  - ▶ Facilitates certainty for generators investment plans
  - ▶ Provides the ability to respond to the market
    - ▶ Aligning access rights with the "liquid" market
  - ▶ Keeps risk / cost of closure (due to market conditions or legislation) at a reasonable level
- ▶ TAR Process
  - ▶ Provides certainty of access for all types of user
  - ▶ Potentially helps new investment as flexibility is guaranteed
  - ▶ Risk is spread between Generators and National Grid
  - ▶ Flexible approach means:
    - ▶ Minimal disruption to the industry (fits with the current framework)
    - ▶ Could be implemented in conjunction with short-term modifications (CA P161-164)

8

Mrs Sarah Hall  
Technical secretary  
TAR – WG CAP165-166  
National Grid House  
Warwick

19 August 2008

Dear Sarah,

### **Inclusion of Non-physical Parties in Long-term Electricity Access Arrangements**

I am pleased to have the opportunity to respond to the above deliberations under WG 2 (CAP 165-166). The position below reflects not only the opinion of Merrill Lynch Commodities (Europe) Trading (MLCE) but of several other active wholesale energy traders in the UK power market the opinion of whom I sought before drafting this response.

In principle the exclusion of “Non-physical Parties” in proposed “Long-term Electricity Access Arrangements”, is discriminatory and against the spirit of a liberalised competitive market, in which different participation capacities bring forward increased liquidity, competitiveness and efficiency. Both in terms of the EU Treaty guarantees of freedom of investment, and in terms of the enshrinement of objectivity and non-discrimination in transmission access as principles at the core of the internal electricity market directive, the *a priori* exclusion of one class of bidder would seem highly questionable under European law. From the outset the question is phrased the wrong way around. There should be a starting assumption of inclusion with the need to prove the case for exclusion otherwise there is more risk of discrimination.

In competitive energy markets there is a difficulty to legislate between “physical” and “non-physical” players as there are two distinctly different issues between:

- Holding the title of a physical Asset (for example a power station)
- Controlling the economic interest of the Asset (for example a Tolling Agreement)

with both classes of Market Players potentially taking either role and therefore having a vested interest into System Access arrangements.

Allowing all parties to participate in access arrangements, improves competition and liquidity for capacity so that where there is a scarce resource, a useful investment signal is developed. Different capabilities may facilitate the entry to the Market of new players particularly if they are small in size and cannot handle the Transmission Risk. Also, the generation market becomes more competitive as a variety of contractual forms are allowed to exist. For example, tolling arrangements and optimisation for merchant plants where capacity is managed by the “off-taker” who may very well be a “Non-Physical” player. Preventing broad access only acts to further cement the vertically integrated model that the UK has drifted towards, and has recently come under fire as not adequately “competitive”, by creating a cosy club of like minded interests that will not compete against each other for capacity.

At this point the case of Australian policy deliberations on “Emission Allowances Auctions” should maybe brought into attention:

In a recent Australian policy document the issue of narrowing participation was dismissed, the issue being whether participation at auctions should be universal or restricted to “liable – CO2” entities only. Universal participation would allow non-liable entities, including financial intermediaries, to participate in auctions. Feedback from some entities has indicated concern that the participation of non-liable entities in auctions may result in speculation and the bidding up of prices.

The Australian Policy Decision concluded that: “An auction is more likely to deliver accurate price signals if the field of bidders is competitive. Smaller liable entities may need to use the services of specialist financial intermediaries to help them manage their emissions obligations over the year, as it would be too expensive and inefficient for them to directly participate in auctions.”

Perhaps it is worth adding to the commercial arguments the fact that the financial transmission rights markets in the US also permit non-physical players to participate. The reason for that is exactly that financial players, if subject to the same collateral and anti-hording requirements as the rest of the market participants, can bring additional liquidity to the market and offer risk management services to smaller participants that may not have the same capability.

The risk of a 'non-physical' player buying access rights and triggering investment costs that may not be used is no higher than it is for any other party. Obviously Access Arrangements will be designed around some “anti-hoarding” measures, by which access rights may be either transferred in secondary trading or lost if not used by an appropriate deadline. The firm financial commitment for buying capacity and securitising the subsequent TNUOS charges is a real cost for all bidders.

The discussion on gaming is also overplayed. Capacity speculation within networks is not viable when there are appropriate anti-hoarding measures in place, and in any case there can be no provision on which class of Market Player may trade purely on speculative basis. On the other hand no legislation can prevent non-physical players acting on the capacity market through a physical player and a “sleeve” arrangement. Taking as an example the UK Gas Market, abusive squeezes in the gas capacity market have not worked as capacity simply becomes free for those that can physically utilise it. There is no case of abusing gas shippers following the introduction of the auction mechanism. Again this argument on gaming must be proven, not disprove.

Transmission Access Review represents a significant overhaul of the UK Electricity Market and all possibilities should be considered before the scope is narrowed in line with particular interests. The argument that because of current arrangements, only physical parties can apply for Transmission Entry Capacity (TEC) and therefore, in order to allow non-physical parties to trade access, a new category of non-physical user would need to be included and the CUSC would need to be substantially rewritten to separate access rights from users' obligations, is not sufficient to justify an exclusion. TAR is a major exercise and if it requires substantial changes to CUSC so be it. The Technical Obligations and Capabilities (in Connection Conditions of the Grid Code) for which the physical players are rewarded (Ancillary Services etc.) should remain linked to physical generation equipment.

Nick Frydas

## Note on UCA Based Alternative

CAP165 is focussed on providing more certainty for National Grid regarding the exit of plant from the system and on ensuring that both new and existing users provide equivalent levels of user commitment. For existing users this commitment is provided by nominating the number of years of long-term rights they require and paying the appropriate charges.

User commitment is concerned with the potential for stranded assets. Analysis by National Grid has shown that TNuoS is not a good proxy for investment costs in a zone and should not therefore be used as the basis for user commitment. National Grid has therefore proposed an alternative in which commitment is based on UCA, a measure of the potential cost of reinforcement in a revenue driver zone. This is set as part of the price control review and can be quite different from TNuoS in a region. It is proposed that new generators pay a proportion of UCA which increases up to completion. Post-commissioning, generators would book TEC for a period and be liable for TNuoS charges for that period. However, if a generator wished to terminate early, or were deemed to have terminated early, they would face a charge based, not on TNuoS, but on UCA. Although the use of UCA appears to improve commitment, there are serious issues with this approach.

The proposed use of UCA as a termination charge can result in a terminating generator paying more than the total TNuoS charges that they are liable for on the remainder of their booking. This could happen in a positive or negative charging zone. The UCA is therefore essentially a penal charge for terminating early. This is extremely unusual in a contract and we should avoid this if at all possible.

One effect of the penal termination charge is to reduce the efficiency of plant exit from the system. If the profits of a generator are marginal, a decision may be taken to close the plant. However, if the plant faces a termination charge, the losses from running the plant may be less than the termination charge and the plant remains on the system. The economic efficiency of the electricity system is therefore reduced.

Alternatively, the plant could effectively shut but not terminate the TEC booking. The National Grid straw man proposes a test whereby the generator is deemed to have shut if it hasn't generated in that year and does not pass an appeals process. This appears to fundamentally change the nature of TEC from an access product which entitles the holder to generate, to an access product which obliges the owner to generate. Any such change needs to be thoroughly understood and at present, I would be opposed to such a radical change in the nature of TEC.

In developing this modification, trade-offs will need to be made. The trade-off here is between the efficiency of the electricity system as a whole through efficient entry and exit of generation and the potential for stranded assets. At present the working group has not been provided with any information regarding the history of stranded assets or the potential for these in the future. This information is required in order to establish the size of the potential problem and make the appropriate trade-off. Our current view is that, given the large volume of plant wishing to connect to the network, the potential for stranded assets on the wider network will be low.

My current view is that UCA should not be used for user commitment for the wider network. CAP165 is focussed on providing certainty to National Grid by booking access for a number of years and paying the appropriate charge. If a generator terminates early they should be liable for no charges beyond these levels. Any termination charge should therefore be based on TNuoS. If this approach does not provide sufficient commitment, then the effectiveness of introducing finite access rights to provide National Grid with more certainty needs to be questioned.

Cathy McClay, 19<sup>th</sup> August 2008

## Meeting Nine – 4<sup>th</sup> September 2008

### CAP165 – Revised National Grid Alternative

Transmission Access Working Group 2  
Meeting 9, 4<sup>th</sup> September 2008

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### CAP165 – Revised National Grid Alternative

#### Agenda

- Rationale for revised alternative
- Pre-commissioning user commitment
- Post-commissioning user commitment
- Termination
- Security

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### CAP165 – Revised National Grid Alternative

#### Rationale

- Previous UCA based alternative driven by concern that any difference in treatment between pre- and post-commissioning generators would be discriminatory
- But it may be justifiable to treat these two groups differently if the costs associated with them are different
  - UCAs reflect incremental investment costs – more appropriate liability for pre-commissioning generator
  - TNUoS reflects long-term costs – more appropriate liability for commissioned generator, generating and contributing to the cost of the transmission system

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### CAP165 – Revised National Grid Alternative

#### Differences between UCAs and TNUoS

UCA	TNUoS
CAPEX	Annuitised over 50 years
Incremental cost	Long run marginal cost
Future reinforcement	Current circuits
Lumpy	Smooth
Includes spare capacity	Excludes spare capacity
Gross	Net
Absolute	27:73
Revenue driver	Local charging
local and wider split	local and wider split
Non locational assets included	Locational wider assets only

### CAP165 – Revised National Grid Alternative

#### Rationale (2)

- Discrimination may, however, result where pre-commissioning generators do not complete their projects
  - Would terminate, and (in last year prior to commissioning) would incur whole charge, without receiving any access rights
  - A post-commissioning generator paying the whole of its liability would receive access rights for the booking period
- Could avoid this potential discrimination by giving wider access rights for a number of years to terminating pre-commissioning generators
  - (if terminated at a stage where full 50% of UCA incurred)
- How many years?
  - TNUoS is annuitised – a capital contribution would be equal to 15.2 times the annual charge. 50% of this would therefore be equivalent to purchasing 8 years worth of access
  - In addition, system wide comparison of 50% of UCA and TNUoS gives an average of 8 years

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### CAP165 – Revised National Grid Alternative

#### Rationale (3)

- But what would a user that had cancelled its project do with 8 years worth of access rights?
- Trade them to, or share them with,
  - Another pre-commissioning generator; or
  - A post-commissioning generator.
- BUT – if somebody else uses the rights, then TNUoS would have been the correct charge to have been levied
- Therefore, generator that terminates pre-commissioning should get option to trade rights to, or share them with, another party
  - Would need to ensure that assets utilised
  - If so, TNUoS payments net off remaining UCA liability up to 8 years
  - If rights not sold or shared, full UCA is incurred

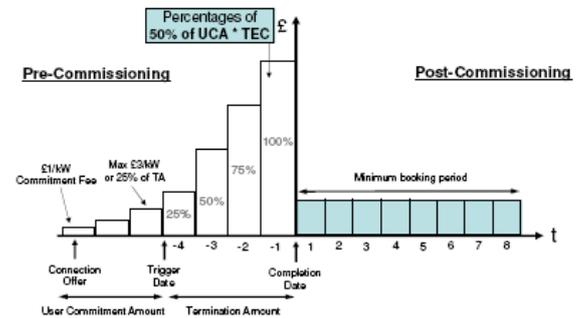
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### CAP165 – Revised National Grid Alternative *Pre-commissioning user commitment*

- Pre-commissioning termination charge would be based directly on 50% of the relevant UCA (“termination amount”)
- Termination amount would be profiled 25/50/75/100% over 4 years prior to commissioning
- A £1/2/3/kW user commitment amount would apply before this (capped to 25% of the termination amount)
  - Covers pre-engineering and consents costs
  - Disincentivises speculative applications
- Users would have to book a minimum access period of 8 years to apply after commissioning

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### CAP165 – UCA Based Alternative *Pre-commissioning user commitment (2)*



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### CAP165 – Revised National Grid Alternative *Post-commissioning user commitment*

- Initial minimum booking period of 8 years
- Otherwise, any period of booking (in whole financial years)
- Generators liable to pay (or be paid) TNUoS charges for entire booking

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### CAP165 – UCA Based Alternative *Termination*

- Pre-commissioning generator that does not progress avoids (UCA based) termination charge provided they sell access right to, or share with, another user(s) for minimum period
- Post-commissioning generator that closes early avoids (TNUoS) liability provided they sell access right to, or share with, another user(s) for remaining period

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### CAP165 – UCA Based Alternative *Security*

- Security based on 1 year
- Security >1 year (up to 50% of UCA) for pre-commissioning generators
  - Costs do not equal charges
  - Higher risk – no generator assets
- Security may be >1 year for post-commissioning generators in “certain circumstances”
  - i.e. old generators making long bookings
  - Non-physical players?

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### CAP165 – Comparison of Original and Alternative Amendment Proposals

*Transmission Access Working Group 2  
Meeting 9, 4<sup>th</sup> September 2008*

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### CAP165 Comparison of original and alternatives

	CAP165 Original	Revised National Grid Alternative	Drax Rolling Notice Alternative
Pre-commissioning user commitment	8 years of TNUoS	50% of UCA	50% of UCA
Profile of user commitment	25/50/75/100%	25/50/75/100%	25/50/75/100%
User Commitment Amount	£1/£2/£3/kW	£1/£2/£3/kW	£1/£2/£3/kW
Pre-commissioning security	Yes	Yes	Yes
Post-commissioning user commitment	Liability to pay TNUoS for booking	Liability to pay TNUoS for booking	Liability to pay TNUoS for booking
Minimum initial booking period for new	8 years	8 years (UCA applies up to 8 yrs)	Up to X, but only rolling if X
Length of commitment	Open ended	Open ended	X years
Post-commissioning security	1 year	1 year; >1 year under certain criteria	??

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## Analysis on Construction Lead Times

Transmission Access WG2  
4<sup>th</sup> September 2008

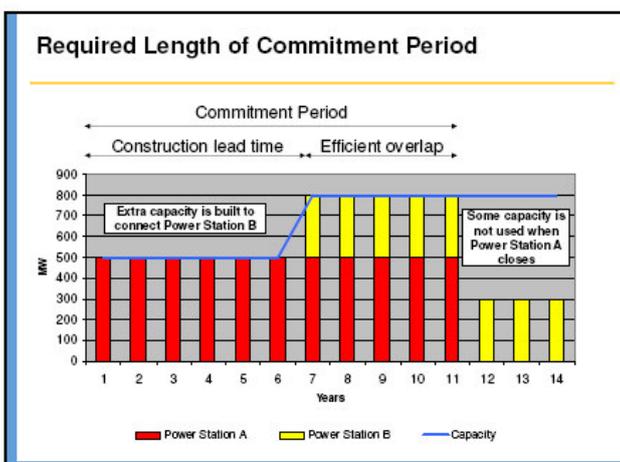
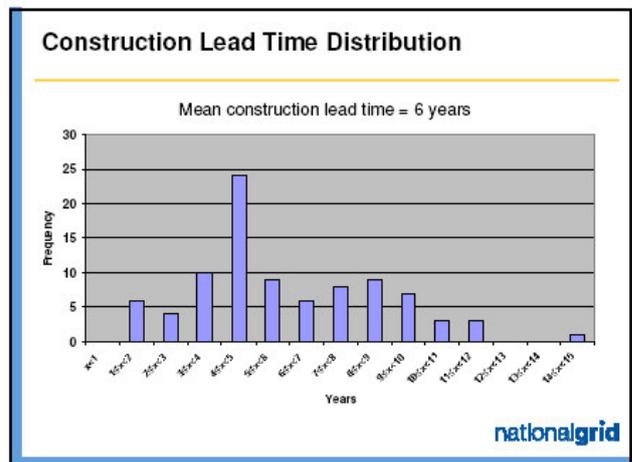
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### Construction Lead Time Analysis

- 92 construction agreements reviewed
- The date the agreement was signed is compared with the contracted completion date

- Analysis does not take into account renegotiated completion dates

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### Conclusion

- For commitment period to give efficient investment signals it should be:
  - length of the construction lead time + efficient overlap period
- This period is likely to be longer than users are willing to commit

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## Meeting Eleven –23<sup>rd</sup> September 2008

### CAP165 – Scottish Revenue Drivers

Transmission Access Working Group 2  
Meeting 11, 23<sup>rd</sup> September 2008

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### CAP165 – Scottish Revenue Drivers

#### Agenda

- Background
- England & Wales revenue drivers
- Overview of Scottish revenue drivers
- National Grid transfer revenue driver
- Issues
- Options

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### CAP165 – Scottish Revenue Drivers

#### Background

- TNUoS multiplier not reflective of UCAs
- Therefore, National Grid (and Drax) alternative proposes to use UCAs directly for pre-commissioning user commitment
- In England & Wales, propose to use National Grid “Zonal Surplus” revenue drivers
  - i.e. those associated with non-local investment resulting from an increase in net generation in a zone
- However, Scottish revenue drivers structured quite differently

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### CAP165 – Scottish Revenue Drivers

#### England & Wales revenue drivers

Revenue Drivers (£/kW)	Local	Surplus	Deficit
South & South West	17.5	0.0	23.3
Thames Estuary	17.5	70.0	0.0
London	70.0	0.0	291.6
South Wales	17.5	29.2	23.3
East & Home Counties	11.7	75.8	17.5
West Midlands	5.8	0.0	46.7
East Midlands	5.8	64.1	11.7
North West & North Wales	35.0	52.5	0.0
Yorkshire & Lincolnshire	17.5	70.0	0.0
North East	17.5	58.3	0.0

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### CAP165 – Scottish Revenue Drivers

#### Overview of Scottish revenue drivers

- No zones – defined by TO area
- Focus on local infrastructure
  - £32/kW for SHETL
  - £52/kW for SPT
- Revenue for deeper reinforcement based on £m for certain defined schemes for SHETL
- No schemes defined for SPT
  - “conditions and associated costs too uncertain”
  - Licensees “might wish to propose” additional revenue drivers

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### CAP165 – Scottish Revenue Drivers

#### National Grid transfer revenue driver

- For Scotland to England transfers above baseline, a revenue driver of £320/kW is triggered

MW	2007/08	2008/09	2009/10	2010/11	2011/12
Scottish Transfers	2,200	2,200	2,200	2,800	3,200

- Derived from within baseline increases
  - 2,200MW to 2,800MW @ £175/kW
  - 2,800MW to 3,200MW @ £458/kW
- No SPT revenue drivers for:
  - Cross border flows; or
  - Intra-Scotland transfers

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### CAP165 – Scottish Revenue Drivers

#### Issues

- National Grid transfer revenue driver
  - £320/kW very significantly higher than E&W UCAs
  - Transitional generators in Scotland are not dependent on E&W or interconnector upgrades
  - But completely cost reflective of higher costs of investing in transmission for Scottish generation
- No zonal wider surplus revenue drivers in Scotland
  - What is most comparable to E&W wider zonal surplus UCAs?

**nationalgrid**

### CAP165 – Scottish Revenue Drivers

#### Options (1)

- For National Grid transfer revenue driver
  1. Include at £320/kW
  2. Exclude for transitional projects
  3. Include at £175/kW
    - But other UCAs based on a range of increasingly expensive reinforcements

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### CAP165 – Scottish Revenue Drivers

#### Options (2)

- For Scottish revenue drivers
  1. Derive a wider UCA for SHETL, based on identified deeper reinforcements
    - £102/kW (plus £320/kW)
    - SPT zero? (plus £320/kW)
  2. Derive wider UCAs by taking total baseline allowances and deducting local UCAs
    - SHETL £45/kW
    - SPT £159/kW
  3. Calculate equivalent figures from costs for a range of connection schemes?

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CAP165 Alternative Approach  
Pre- and Post-Commissioning User Commitment

23 September 2008




### User Commitment Dilemma

- Different problems require different solutions
  - Pre-Commissioning:**
    - User commitment demonstrated by investment in the asset
    - Once commissioned, we would expect maximum utilisation of the asset
    - No short term issues for National Grid or the generator
  - Post-Commissioning:**
    - User commitment becomes problematic at the end of the asset's life
    - Generator must base its decision on market signals
    - National Grid seeks more certain investment signals and closure signals

### Issues to Address

- Generators base their investment decisions on a number of factors including:
  - Input costs (fuel, carbon, Capex, fixed costs, etc...)
  - Revenue (power, ROCs, etc...)
  - Transmission access costs (TNUoS)
  - Changes in legislation (e.g. environmental)
- Transmission Owners base their decisions on different factors:
  - Investment in the network has to match the generation asset's life
  - There may be a mismatch between transmission investment signals and plant closure signals (made uncertain by wholesale energy prices) creating stranded assets which do not:
    - Earn revenue in the price control
    - Contribute to the efficient running of the network
    - Facilitate a competitive energy market
- Underlying Issues
  - Inherently difficult to reconcile interests of generators and the transmission network
  - Difficult to hypothecate a cost for shared assets the "deeper" into the network you go
  - Local charges can be more easily targeted than deep charges
  - It may be that there is an intermediate class of network which is not deep or local as it is only partially made redundant by a particular generation asset closure

### Aim of this Proposal

- Assumptions
  - Both sides have time sensitivity issues
  - It is in the interests of both sides to provide as much certainty as possible
  - Need to consider the interests of future investors in generation
- The aim of this proposal is to find a compromise
  - Appropriate investment signals and more clear closure signals for National Grid
  - Increase in commitment from post-commissioning generators
  - Certainty of access for all types of generators / investors
  - To work with flexible short-term mechanisms

### Pre-Commissioning User Commitment

- National Grid's UCA Based Alternative methodology
  - 50% of the relevant zonal UCA
    - Profitted 25/50/75/100% over the four years prior to completion
    - This would be secured
  - User Commitment Amount
    - Profitted £1/£2/£3/kW
    - Incurred in the three years prior to this
    - To capture pre-engineering and consent costs

### Post-Commissioning User Commitment

- User Commitment equals
  - TNUoS x Commitment Period (y years)
- Length of the Commitment Period should:
  - Allow generators to respond to market conditions
  - Provide National Grid with adequate closure signals
- This proposal has a 4 year Commitment Period, based upon:
  - National Grid analysis suggesting an average (mean) six year period from signing a connection agreement to commissioning
    - UK power market tends to have 2-3 year liquidity
      - However, when hedging large plant this is closer to 2 years due to lower liquidity in later years
    - The effect of new legislation needs to be taken into account
      - Creation of new legislation tends to be a lengthy process
      - However, the detailed effects of new legislation tend to be known later in the process
  - The 4 year commitment period provides a 3 year notice period
    - GAP131 analysis suggests that up to 25% of transmission investment occurs >3.5 years prior to commissioning
      - Therefore, this proposal could avoid up to 75% of unrequired pre-commissioning investment
  - The Commitment Period should be based upon whole years (i.e. Apr-Mar)
- This is a compromise solution that shares the risk between the operators and National Grid

### Proposed Process

- ▶ All current and newly commissioned generators follow the same process, although:
  - ▶ Existing generators at the time of approval follow the "Transition Period Process" (later in this presentation)
  - ▶ New generators must commit to the system for a minimum period of 4 years (setting the rolling process)
- ▶ By the 31 March (or prior working day if this falls on a non-working day) each year, each generator must decide whether to:
  - a) Remain on the system for another 4 years
    - ▶ No action required by the generator
    - ▶ NG shall receive TNUoS from the generator each year for at least the following 4 years
    - ▶ NG now has a signal that further investment is viable in the applicable area
  - b) Decide to leave the system after the next 3 years
    - ▶ The generator submits a "Commitment Notice"
    - ▶ NG shall receive TNUoS from the generator each year for the next 3 years only
    - ▶ The generator leaves the system at the end of the 3 years; for clarity:
      - ▶ Generator submits a Commitment Notice on 31 March 2009
      - ▶ Generator does not have the option to remain on the system beyond its third year of the notice, unless they successfully reapply for capacity (next slide)
      - ▶ Generator has no further commitment to pay after 31 March 2012
- ▶ At the end of the Notice period, the generator relinquishes their access rights and must reapply for a connection if they wish to reconnect to the system

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### Early Termination & Reapplication

- ▶ A generator can leave the system early at any time
  - ▶ However, the generator must pay National Grid the greater of:
    - a) Any outstanding commitment for the current year plus either:
      - i) If no Commitment Notice has been received, the relevant commitment for the next three years
      - ii) If a Commitment Notice has been received, the relevant commitment for the remainder of the notice period
    - b) Zero
  - ▶ The generator relinquishes their access rights and must reapply for a connection if they wish to reconnect to the system
- ▶ A generator that has left the system may apply to rejoin the system at any time
  - ▶ They can only rejoin if there is capacity available
  - ▶ All users wishing to join the system will have equal priority (new users and previous users)
  - ▶ A returning user must specify how many years they wish to rejoin the system, either:
    - a) A 4 year Commitment Period: if available, the user joins the system and enters the rolling notice period regime
    - b) A 1, 2 or 3 year Commitment Period: if available, the user commits to paying TNUoS each year, leaving the system at the end of the requested Commitment Period
      - ▶ At the end of the Commitment Period, the generator relinquishes their access rights and must reapply for a connection if they wish to reconnect to the system

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### Transition Period Process

- ▶ During the transition period, existing generators must specify how many years they wish to remain on the system, either:
  - ▶ A 4 year Commitment Period: the user enters the rolling notice period regime
  - ▶ A 1, 2 or 3 year Commitment Period: the user commits to paying TNUoS each year, leaving the system at the end of the requested Commitment Period
    - ▶ At the end of the Commitment Period, the generator relinquishes their access rights and must reapply for a connection if they wish to reconnect to the system

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### Benefits of the Proposal

- ▶ National Grid
  - ▶ Provides greater signals for plant closure (capacity release)
    - ▶ Therefore providing efficient investment signals for the network
  - ▶ Provides certainty of receiving the relevant commitment for the Commitment Period
  - ▶ Facilitates a consistent definition of TEC property rights in the CUSC
- ▶ Generators
  - ▶ Facilitates certainty for generators investment plans
  - ▶ Provides the ability to respond to the market
    - ▶ Aligning access rights with the "liquid" market
  - ▶ Keeps risk / cost of closure (due to market conditions or legislation) at a reasonable level
- ▶ TAR Process
  - ▶ Provides certainty of access for all types of generator
  - ▶ Potentially helps new investment as flexibility is guaranteed
  - ▶ Risk is spread between generators and National Grid
  - ▶ Flexible approach means:
    - ▶ Minimal disruption to the industry (fits with the current framework)
    - ▶ Could be implemented in conjunction with short-term transmission access modifications

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**ANNEX 8 – LEGAL TEXT TO GIVE EFFECT TO THE WORKING GROUP  
ALTERNATIVE AMENDMENTS FOR CAP165**

## **CAP 165 (Finite Long Term Entry Rights & LCN): Summary Sheet of Proposed Amendments**

### **1. Overview of Changes**

- 1.1 The changes in the legal drafting that are being proposed to implement CAP 165 essentially consist in introducing the concept of Local Capacity Nomination (“LCN”) (which is also common to CAP 161-163 and 166) and provide for Transmission Entry Capacity to be temporally defined.
- 1.2 The changes within the CUSC itself are colour coded as those generally required to introduce LCN and amend the structure, given the other proposals, to allow for other short term access products, (highlighted turquoise), and the changes to provide for the cancellation charges and finite nature of TEC shown coloured red. Where new documents have been introduced (the forms of Construction Agreement and Clause 10) the text is not shaded :
- 1.3 The drafting does not provide for the original CAP 165 but caters for seven Working Group alternative amendments. The changes to the drafting required for WGAA2 to 7 is identified by separate schedule and in the case of WGAA2 requires an alternative new form of construction Agreement
- 1.4 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 5 (by red line against existing sec)
  5. CUSC Section 6 (by summary)
  6. CUSC Section 9 (by summary)
  7. CUSC Section 10 (transitional provisions to effectively deal with the “creation” of LCN and “finite” TEC)
  8. CUSC Section 11 (by summary)
  9. Schedule 2 Exhibit 1 (BCA) by redline
  10. Schedule 2 Exhibit 2 (BEGA) by redline
  11. Schedule 2 Exhibit 3 (Construction Agreement) (as this is a new exhibit we will also separately publish a redline against existing exhibit)
  12. Schedule 4 User Commitment Principles

- 13. Exhibit B (BCA Application) by redline
- 14. Exhibit C (BCA Offer) by redline
- 15. Exhibit D (BEGA Application) by redline
- 16. Exhibit E (BEGA Offer) by redline

**Part A - Text to give effect to WGAA1**

## Proposed Amendments to CUSC Section 2 under CAP 165 (LCN and Finite Long Term Entry Rights)

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)*

#### **1.1 4.4 IMPORT OF POWER TO CONNECTION SITE**

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 User~~ **a 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**

#### **CONTENTS**

- 3.1 Introduction
  - PART IA - GENERAL - GENERATION
- 3.2 Rights to Use the GB Transmission System
- 3.3 Other Site Specific Technical Conditions for Embedded Power Stations and Distribution Interconnectors
  - PART IB - GENERAL - SUPPLY
- 3.4 Rights to Use the GB Transmission System
- 3.5 Supplier Customer Details
- 3.6 Suppliers of Non-Embedded Customers
- 3.7 Use of System Application
- 3.8 Termination Provisions
  - PART II - USE OF SYSTEM CHARGES
  - PART IIA - GENERAL
- 3.9 Use of System Charges
  - PART IIB - TRANSMISSION NETWORK USE OF SYSTEM CHARGES
- 3.10 Data Requirements
- 3.11 Variation of Forecasts during the Financial Year
- 3.12 Validation of Demand Forecasts
- 3.13 Reconciliation Statements
- 3.14 Revision of Charges
  - PART IIC - BALANCING SERVICES USE OF SYSTEM CHARGES

- 3.15 Introduction
- 3.16 Reconciliation
- 3.17 [No heading]
- 3.18 [No heading]
- 3.19 Reconciliation Payments
- 3.20 Revision of Charges

### PART III - CREDIT REQUIREMENTS

- 3.21 BSUOS Charges and TNUOS Demand Charges: Provision of Security Cover
  - 3.22 Credit Monitoring
  - 3.23 Payment Default
  - 3.24 Utilisation of Funds
  - 3.25 User's Right to Withdraw Funds
  - 3.26 User's Allowed Credit
  - 3.27 Transitional Arrangements
- Appendix 1 Credit Arrangements

## 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** A User's Use of System may occur in one of the ways specified in Appendix 3 to Section 3 of the CUSC.

#### PART IA - GENERAL - GENERATION

This Part IA deals with Use of System rights and obligations relating to Power Stations directly Connected to the GB Transmission System, 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 1.2 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 sites~~ **Node** and each of its **Distribution 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** **~~1.2.2~~ Embedded Power Station and Distribution Interconnector 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 necessary **Modification Offer** relevant to the **Embedded Power Station or Distribution 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.

### ~~3.2.5~~3.2.8 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.

### ~~3.2.6~~3.2.9 Operational Notification

Upon compliance by the **User** with the provisions of Paragraph ~~3.2.2~~3.2.6(a) after the commissioning programme in Paragraph ~~3.2.6~~3.2.8 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**.

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

**3.3.1 ~~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 ~~1.3.3~~** Where 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.

### **3.4 ~~1.4~~ RIGHTS TO USE THE GB TRANSMISSION SYSTEM**

**3.4.1 ~~1.4.1~~** 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 ~~1.4.3~~** 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 ~~1.5~~ 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.

### 3.6 ~~1.6~~ **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** ~~1.6.5~~ 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** ~~1.6.6~~ 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** ~~1.6.7~~ **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**.

**3.6.8** ~~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** the **Non-Embedded Customer's User's Equipment** at 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 ~~1.7.1~~ 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 ~~1.7.2~~ Without 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 ~~1.7.4~~ 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 ~~1.7.5~~ 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.

**3.7.6** ~~1.7.6~~ 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** not used

### **3.8** ~~1.8~~ — **TERMINATION PROVISIONS**

**3.8.1** ~~1.8.1~~ 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

#### 3.9 ~~1.9~~ USE OF SYSTEM CHARGES

##### General Liability to pay Use of System Charges

- 3.9.1 ~~1.9.1~~ Subject to the provisions of the **CUSC**, and any relevant **Bilateral Agreement**, together with the relevant **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 ~~1.9.2~~ 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.

#### Not Used Liability for payment of Entry Overrun Charges

**3.9.4** .

#### Liability for Balancing Services Use of System Charges

**3.9.5** ~~1.9.3~~ 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** ~~1.9.4~~ 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** 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 10<sup>th</sup> 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 ~~1.10.4~~ Where 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 10<sup>th</sup> day of the month following completion of the **Use of System Supply Confirmation Notice**.

#### Provision of TEC Forecast

3.10.5 ~~1.10.5~~ 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 **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.

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### **~~3.11.1.1~~ VARIATION OF FORECASTS DURING THE FINANCIAL YEAR**

**3.11.1 ~~1.11.1~~** 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 ~~1.11.2~~** 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 10<sup>th</sup> 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** 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** 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** 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 ~~BSUOS CHARGES AND TNUOS DEMAND CHARGES~~;  
PROVISION OF SECURITY COVER**

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** 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 ~~NGG~~**The 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 ~~NGG~~**The Company**:-
  - (i) 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
  - (ii) 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

- (a) If the bank issuing the **User's Letter of Credit** ceases to 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** or an **Insurance 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) Not Used
- (e) Not Used
- (f) Not Used
- (g) Not Used
- (h) interest on the amounts referred to in (a), (b), (c), (d), (e), (f) and (g) 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**:
  - (i) 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**The Company 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** have been duly and finally paid and that it is not otherwise in default in any respect of any **Balancing Services Use of System Charges** ~~or~~, **Transmission Network Use of System Demand Charges**, **Short Term Access Products 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** 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/or~~ **Charges**, **Transmission Network Use of System Demand Charges**, **Short**

**Term Access Products 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**) 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

In addition to the provisions of Paragraph 3.23 above if **The Company** serves a notice of default under the terms of Paragraph 5.5 or a notice of termination under Paragraph 5.7 then **The Company** shall be entitled to demand payment of any of the **Balancing Services Use of System Charges**—~~and/or,~~ **Transmission Network Use of System Demand Charges**, **Short Term Access Products Charges** which

are outstanding from the relevant **User** whether or not the **Use of System Payment Date** in respect of them shall have passed and:-

- (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** 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, Short Term Access Products Charges**, 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 **NGCThe Company** 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 **NGCThe Company** that it wishes its **User's Allowed Credit** 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 **NGCThe 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 by 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 **NGCThe Company** that it 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 **NGCThe Company'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 AA+ AA AA-	Aaa Aa1 Aa2 Aa3	AAA AA+ AA AA-	100
A+ A A-	A1 A2 A3	A+ A A-	40
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 Date (inclusive)	Security Period End Date (inclusive)	HH Base Percentage
1 <sup>st</sup> April	30 <sup>th</sup> June	-8.4%
1 <sup>st</sup> July	30 <sup>th</sup> September	-33.4%
1 <sup>st</sup> October	31 <sup>st</sup> December	-49.1%
1 <sup>st</sup> January	31 <sup>st</sup> March	7.0%

(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 <sup>st</sup> April	30 <sup>th</sup> June	(d)4.3%
1 <sup>st</sup> July	30 <sup>th</sup> September	(e)-1.5%
1 <sup>st</sup> October	31 <sup>st</sup> December	(f)-2.8%
1 <sup>st</sup> January	31 <sup>st</sup> 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:

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

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**.

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

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

$CA_{HH}$ , 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 22<sup>nd</sup> 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 22<sup>nd</sup> 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 22<sup>nd</sup> 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 22<sup>nd</sup> 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**,  $p$  commences by reference to the following:

Month in which <b>Reported Period of Increase commences</b>	Remaining proportion of <b>HH Charges</b>
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 10<sup>th</sup> 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:

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

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, $W_{NHH,m}$
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 22<sup>nd</sup> 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 22<sup>nd</sup> 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 22<sup>nd</sup> 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 22<sup>nd</sup> 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,  $p$**  commences by reference to the following:

Month in which <b>Reported Period of Increase commences</b>	Remaining proportion of <b>NHH Charges</b>
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 10<sup>th</sup> 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**



## 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** and the **TEC Period** to which it relates 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 and during the TEC Period**

2.2.1 Each **User** shall be entitled to decrease the **Transmission Entry Capacity** for the **Node** during the **TEC period** 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.

2.2.4 **Users** wishing to decrease their **TEC** in accordance with this Paragraph 2.2 of Appendix 3 shall be liable, on the **Effective TEC Decrease Date**, to pay **The Company** a **Capacity Reduction Charge**, such payment to be made within 14 days of **The Company's** invoice.

### 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 and until the end of the **TEC Period**.

### 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** 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** in 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

3.6.1 Each **Request for a STTEC Authorisation** will 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:-

- (i) 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 Appendix C to the relevant **Bilateral 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:

- (i) 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 C 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:

(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**.

4.2.2 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. Not Used**

**6. Not Used**

**7. Not Used**

**8. Not Used**

**9. Not Used**

## **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 **Not Used**
- 10.1.3 **Not Used**
- 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:
  - (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**.

10.3.4 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:
- (i) 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;
- (iii) 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**;
3. 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. Not Used

**END OF APPENDIX 3**

**CUSC - SECTION 5**  
**EVENTS OF DEFAULT, DEENERGISATION,**  
**AND DISCONNECTION**

**CONTENTS**

- 5.1 Duration and Termination
- 5.2 Emergency Deenergisation
- 5.3 Generic Events of Default and Deenergisation
- 5.4 Site Specific Deenergisation and Disconnection
- 5.5 Balancing Services Use of System Charges: Events of Default
- 5.6 Notice to Disconnect
- 5.7 Disconnection
- 5.8 Not Used
- 5.9 Non-Embedded Customers
- 5.10 Relevant Interruptions

## **CUSC - Section 5**

### **Events of Default, Deenergisation, Disconnection and Decommissioning**

#### **5.1 DURATION AND TERMINATION**

##### **5.1.1 Licensed CUSC Parties**

Upon either:

- (a) termination of all **Bilateral Agreements, Mandatory Services Agreements and Construction Agreements** entered into by a **User** and cessation of any other right to use the **GB Transmission System** pursuant to Paragraph 3.8 or Paragraph 9.23; or
- (b) a **User** having a **Licence** but not yet being connected to or otherwise using the **GB Transmission System**, until such time as the **User** accepts an **Offer** to connect to or use the **GB Transmission System**,

a **User** with a **Licence** shall be or continue to be a **CUSC Party** but shall not (except in the case of Paragraph 5.1.5) have any further rights and obligations for the period of such dormancy under the **CUSC** (and shall be a “**Dormant CUSC Party**”) until the execution (or other entering into) of a **Bilateral Agreement** or commencement / recommencement of its right to use the **GB Transmission System** pursuant to the **CUSC**. Termination or expiry of a particular **Bilateral Agreement, Mandatory Services Agreement or Construction Agreement** shall not, of itself, cause the relevant **User** to become a **Dormant CUSC Party**.

- 5.1.2 A **Dormant CUSC Party** may once it ceases to have a **Licence** which requires it to be a party to the **CUSC Framework Agreement**, by prior notice to **The Company** cease to be a **CUSC Party** from the date specified in such notice, on which date it shall cease to be a party to the **CUSC Framework Agreement**.

##### **5.1.3 Non-Licensed CUSC Parties**

Upon termination of all **Bilateral Agreements, Mandatory Services Agreements and Construction Agreements** entered into by a **User** and cessation of any other right to use the **GB**

**Transmission System** pursuant to Paragraph 3.8 or Paragraph 9.23, a **User** without a **Licence** shall cease to be a **CUSC Party** from the date of cessation of the last such agreement or right to use, and shall on that date cease to be a party to the **CUSC Framework Agreement**.

5.1.4 A person ceasing to be a **CUSC Party** or becoming a **Dormant CUSC Party** shall not affect any rights or obligations of any **CUSC Party** which may have accrued to the date of termination or dormancy under the **CUSC**, any **Bilateral Agreement** or **Mandatory Services Agreement** or **Construction Agreement** or the **Charging Statements** or otherwise and shall not affect any continuing obligations of any other **CUSC Party** under the **CUSC**.

5.1.5 **Embedded Exemptable Large Power Station**

A **User** in respect of an **Embedded Exemptable Large Power Station** shall (unless **The Company** agrees otherwise in writing, such agreement not to be unreasonably withheld or delayed), once it has acceded to the **CUSC Framework Agreement** continue to remain a **CUSC Party** and shall not be treated as a **Dormant CUSC Party** notwithstanding the provisions of Paragraph 5.1.1.

**5.2 EMERGENCY DEENERGISATION**

5.2.1 **Emergency Deenergisation by The Company**

If, in the reasonable opinion of **The Company**, the condition or manner of operation of the **GB Transmission System** or a **User's System** or an **Interconnector** poses an immediate threat of injury or material damage to any person or to the **Total System** or to any **User's System** or to the **GB Transmission System**, **The Company** shall have the right to:

- (a) **Deenergise that User's Equipment**, or
- (b) request the owner of the **Distribution System** to which that **User's Equipment** or equipment for which that **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is connected to **Deenergise that User's Equipment** or equipment for which that **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**),

if it is necessary or expedient to do so to avoid the occurrence of such injury or damage.

#### 5.2.2 Emergency Deenergisation by a User

If, in the reasonable opinion of a **User**, the condition or manner of operation of the **GB Transmission System**, the **Total System** or any other **User's System** poses an immediate threat of injury or material damage to any person or to its **User's System** or **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) that **User** shall have the right to **Deenergise** its **User's Equipment** or equipment for which that **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**), if it is necessary or expedient to do so to avoid the occurrence of such injury or damage.

#### 5.2.3 Post Emergency Reenergisation

**The Company** or, as the case may be, the **User** shall **Reenergise** the **User's Equipment** at the **Connection Site** (or, in the case of the **User** the site of connection) or **The Company** shall request the owner/operator of the **Distribution System** to which the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is connected to **Reenergise** the **User's Equipment** at the site of connection, in each case as quickly as practicable after the circumstances leading to any **Deenergisation** under this Paragraph 5.2 have ceased to exist.

### 5.3 **GENERIC EVENTS OF DEFAULT AND DEENERGISATION**

#### 5.3.1 Generic Events of Default

It shall be an **Event of Default** if:-

- (a) a **User** shall fail to pay (other than by inadvertent error in funds transmission which is discovered by **The Company**, notified to that **User** and corrected within 2 **Business Days** thereafter) any amount properly due or owing from that **User** to **The Company** pursuant to the **CUSC** or any **Bilateral Agreement** and such failure continues unremedied for 7 **Business Days** after the due date for payment; or
- (b) in respect of a **User**:-

- (i) an order of the High Court in England and Wales or an order of the Court of Session in Scotland is made or an effective resolution passed for its insolvent winding up or dissolution; or
- (ii) a receiver (which expression shall include an administrative receiver within the meaning of section 251 Insolvency Act 1986) of the whole or any material part of its assets or undertaking is appointed; or
- (iii) an administration order under section 8 of the Insolvency Act 1986 is made or if a voluntary arrangement is proposed under section 1 of that Act; or
- (iv) a **User** enters into any scheme of arrangement (other than for the purpose of reconstruction or amalgamation upon terms and within such period as may previously have been approved in writing by the **Authority**); or
- (v) any of the events referred to in (i) to (iv) above has occurred and is continuing and a **User** is unable to pay its debts (within the meaning of section 123(1) or (2) of the Insolvency Act 1986 save that such sections shall have effect as if for £750 there was inserted £250,000 and a **User** shall not be deemed to be unable to pay its debts if any demand for payment is being contested in good faith by that **User** with recourse to all appropriate measures and procedures),

and in any such case within 28 days of his appointment the liquidator, receiver, administrative receiver, administrator, nominee or other similar officer has not provided to **The Company** a guarantee of future performance by the **User** of the **CUSC** and all **Bilateral Agreements, Construction Agreements** and **Mandatory Services Agreements** to which the **User** is a party in such form and amount as **The Company** may reasonably require.

### 5.3.2 Generic Deenergisation upon an Event of Default

Provided that at the time the failure specified in Paragraph 5.3.1(a) is still continuing or the circumstances referred to in Paragraph 5.3.1(b) still exist **The Company** may having given

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48 hours notice of an **Event of Default Deenergise** all of the **User's Equipment** which is the subject of a **Bilateral Agreement** with that **User** or may as appropriate instruct the operator of a **Distribution System** to **Deenergise** such **User's Equipment** or in the case of an **Interconnector User** or **Interconnector Error Administrator** request the relevant **Interconnector Owner** to cease or procure the cessation of the transport of power across the **Interconnector** by or on behalf of that **User** provided that prior to **Deenergisation** the **User** may refer the matter to the **Dispute Resolution Procedure**.

### 5.3.3 BSC Deenergisation

**The Company** shall **Deenergise** the **User's Equipment** if it is so instructed by the **BSC Panel** at any time in accordance with the provisions of the **Balancing and Settlement Code**.

### 5.3.4 Generic Disconnection

If the **Event of Default** under Paragraph 5.3.2 or 5.3.3 is still continuing six months after the later of **Deenergisation** and the conclusion of the **Dispute Resolution Procedure** in favour of **The Company**, **The Company** may **Disconnect** all that **User's Equipment** at each **Connection Site** where that **User's Equipment** is connected and:-

- (a) the **User** shall remove any of the **User's Equipment** on, in the case of **Connection Sites** in England and Wales, **The Company's** or, in the case of **Connection Sites** in Scotland, **Relevant Transmission Licensee's** land(as appropriate) within 6 months or such longer period as may be agreed between the **User** and **The Company** or the **Relevant Transmission Licensee** (as appropriate);
- (b) in the case of **Connection Sites** in England and Wales, **The Company** shall remove and, in the case of **Connection Sites** in Scotland, **The Company** shall procure that the **Relevant Transmission Licensee** removes, any of the **Transmission Connection Assets** on the **User's** land within 6 months or such longer period as may be agreed between the **User** and **The Company** or the **Relevant Transmission Licensee** (as appropriate);
- (c) the **User** shall pay to **The Company** forthwith all **Termination Amounts** and also where it occurs prior

to the end of the TEC Period the AC Cancellation Charge; and

- (d) the **User** if unlicensed shall cease to be a **CUSC Party** or if licensed shall become a **Dormant CUSC Party**, as the case may be, and Paragraph 5.1 shall apply.

## 5.4 SITE SPECIFIC DEENERGISATION AND DISCONNECTION

### 5.4.1 Site Specific Breach by the User

If a **User** shall be in breach of any of the provisions of the relevant **Bilateral Agreement**, or the provision of the **CUSC** in relation to that particular connection to and/or use of the **GB Transmission System**, or (other than in relation to a **Supplier**, a **Small Power Station Trading Party**, an **Interconnector User** or an **Interconnector Error Administrator**) of the provisions of the **CUSC** enforcing the provisions of the **Grid Code** (but subject always to Paragraphs 6.3.3 and 6.3.4), and such breach causes or can reasonably be expected to cause a material adverse effect on the business or condition of **The Company** or other **Users** or the **GB Transmission System** or any **User Systems** then **The Company** may:-

- (a) where the breach is capable of remedy, give written notice to the **User** specifying in reasonable detail the nature of the breach and requiring the **User** within 28 days after receipt of such notice, or within any longer period agreed between **The Company** and the **User** to remedy the breach, the agreement of **The Company** not to be unreasonably withheld or delayed; or
- (b) where the breach is incapable of remedy, give written notice to the **User** specifying in reasonable detail the nature of the breach and the reasons why the breach is incapable of remedy and requiring the **User** within 5 **Business Days** after receipt of such notice to undertake to **The Company** not to repeat the breach.

### 5.4.2 Grid Code Procedures - Future Compliance

Whenever **The Company** serves a notice on a **User** pursuant to Paragraph 5.4.1, **The Company** and the **User** shall discuss in good faith and without delay the nature of the breach and each shall use all appropriate procedures available to it under the **Grid Code** (including testing rights and the procedures set out in **OC5** (Testing and Monitoring)) in an attempt to establish as quickly as reasonably practicable a mutually acceptable way

of ensuring future compliance by the **User** with the relevant provision of the **Grid Code**.

#### 5.4.3 Site Specific Deenergisation

- (a) If:
- (i) a **User** fails to comply with any valid notice served on it by **The Company** in accordance with Paragraph 5.4.1(a) or is in breach of any undertaking given in accordance with Paragraph 5.4.1(b) and such breach causes or can be reasonably expected to cause a material adverse effect on the business or condition of **The Company** or other **Users** or the **GB Transmission System** or any **User System**; or
  - (ii) five **Business Days** have elapsed since the date of any valid notice served on the **User** in accordance with Paragraph 5.4.1(b) and no undertaking is given by the **User** in accordance with Paragraph 5.4.1(b);

**The Company** may:

- (iii) provided **The Company** has first complied with **OC5** Monitoring and Testing if appropriate **Deenergise the User's Equipment**; or
- (iv) provided **The Company** has first complied with **OC5** Monitoring and Testing if appropriate request the owner/operator of the **Distribution System** to which the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is or to which the **User's Customers** are connected to **Deenergise 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 relevant site of connection or such **User's Customers** (as the case may be); or
- (v) in the case of an **Interconnector User** or **Interconnector Error Administrator** request the relevant **Interconnector Owner** to cease or procure the cessation of the transport of power

by or on behalf of that **User** across the **Interconnector**,

upon the expiry of at least 48 hours prior written notice to the **User**, provided that at the time of expiry of such notice the breach concerned remains unremedied and that neither party has referred the matter to the **Dispute Resolution Procedure**. In such event **The Company** may:

- (aa) **Deenergise the User's Equipment**, or
- (bb) request the owner of the **Distribution System** to which the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is or to which the **User's Customers** are connected to **Deenergise 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 relevant site of connection or the **User's Customers** (as the case may be), or
- (cc) in the case of an **Interconnector User** or **Interconnector Error Administrator** request the relevant **Interconnector Owner** to cease or to procure the cessation of the transfer of power by or on behalf of that **User** across the **Interconnector**,

forthwith following completion of the **Dispute Resolution Procedure** and final determination of the dispute in **The Company's** favour, subject to **The Company** having given, in the case of **Deenergisation** of an **Embedded Small Power Station**, the relevant **User** not less than 24 hours prior written notice and at the expiry of such notice the breach concerned remaining unremedied.

- (b) If the **User** fails to comply with the **Grid Code** (but subject always to Paragraphs 6.3.3 and 6.3.4 of the **CUSC**) and the **Authority** makes a final order or a confirmed provisional order as set out in sections 25 and 26 of the **Act** against the **User** in respect of such non-compliance which order the **User** breaches **The Company** may in respect of the relevant **Connection Site(s)** or site(s) of connection:

- (i) **Deenergise the User's Equipment**, or
- (ii) request the owner of the **Distribution System** to which the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is connected to **Deenergise the User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**),

upon the expiry of at least 48 hours prior written notice to the **User** provided that at the time of expiry of the notice the **User** continues to fail to comply with the order.

#### 5.4.4 Consequence on Transmission Licence

If a breach of the nature referred to in Paragraph 5.4.1 continues to the extent that it places or seriously threatens to place in the immediate future **The Company** in breach of the **Transmission Licence** and/or places or seriously threatens to place in the immediate future any **Relevant Transmission Licensee** in breach of its transmission licence **The Company** may:

- (a) **Deenergise the User's Equipment**, at the relevant **Connection Site**,
- (b) request the owner of the **Distribution System** to which the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is or to which the **User's Customers** are connected to **Deenergise the User's Equipment** or equipment for which **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) at the relevant site of connection or such **User's Customer** (as the case may be), or
- (c) request the relevant **Interconnector Owner** to cease or procure the cessation of the transport of power by or on behalf of that **User** across the **Interconnector**,

upon the expiry of at least 12 hours, prior written notice to the **User**, provided that at the time of expiry of such notice the breach concerned remains unremedied.

5.4.5 Generic and Site Specific Reenergisation Disputes

(a) If following any **Deenergisation** or cessation of use of an **Interconnector** pursuant to this Paragraph 5.4 or Paragraph 5.3.2 the relevant **User** applies to **The Company** for the **User's Equipment** to be **Reenergised** or for **The Company** to issue instructions that the **User's Customers** be **Re-energised** or for **The Company** to issue instructions to the owner/operator of the **Distribution System** to which the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is connected that it be **Re-energised** or to the relevant **Interconnector Owner** that transport of power across the **Interconnector** can restart, **The Company** shall notify its consent to the **User's Equipment** being **Re-energised** or transport across the **Interconnector** restarting forthwith upon the breach of the **CUSC** or the relevant **Bilateral Agreement** which give rise to the **De-energisation** either:-

- (i) being remedied; or
- (ii) ceasing to be material; or
- (iii) in the case of a **De-energisation** under 5.4.3 ceasing to be of a nature which can reasonably be expected to cause a material adverse effect on the business or condition of **The Company** or other **Users** of the **GB Transmission System**; or
- (iv) in the case of a **De-energisation** under Paragraph 5.4.4 ceasing in **The Company's** opinion to place or seriously threaten to place in the immediate future **The Company** in material breach of the **Transmission Licence** and/or places or seriously threatens to place in the immediate future any **Relevant Transmission Licensee** in material breach of its transmission licence,

and shall forthwith **Re-energise** the **User's Equipment** or issue instructions.

- (b) If **The Company** shall refuse to **Re-energise** the **Users Equipment** or to issue instructions that the **User's Customers** be **Reenergised** or to issue instructions to the owner/operator of the **Distribution System** to which the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is connected that it be **Reenergised**, or to the relevant **Interconnector Owner** that transport of power can restart, or if the **User** is offered terms by **The Company** which the **User** does not accept, this shall be recognised as a dispute over the terms for connection and use of system which may be referred by the **User** to the **Authority** for determination under Standard Condition C9 of the **Transmission Licence**. If the **User** accepts any terms offered by **The Company** or determined by the **Authority** **The Company** shall **Reenergise** the **Users Equipment**, or request the owner of the **Distribution System** to which either the **User's Customers** or the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) is/are connected to **Reenergise** the same or the relevant **Interconnector Owner** to restart that transport of power, forthwith after any request from the **User** for **The Company** to do so.

#### 5.4.6 Specific Events of Default

##### Events of Default

#### 5.4.6.1 Any of the following events shall constitute an **Event of Default**:

- (a) If the breach which led to any **Deenergisation** pursuant to this Paragraph 5.4 remains unremedied at the expiry of at least 6 months after the date of such **Deenergisation**, **The Company** may declare by notice in writing to the **User** that such breach has become an **Event of Default** provided that:
- (i) all disputes arising out of the subject-matter of this Paragraph 5.4 which are referred to the **Dispute Resolution Procedure** have been finally determined in favour of **The Company**; and

- (ii) any reference to the **Authority** pursuant to Paragraph 5.4.5(b) hereof has then been finally determined in favour of **The Company** or any terms settled pursuant to such procedure have not been accepted by the **User**.
- (b) If any or all of the **Events of Default** in Paragraph 5.3.1 has or have occurred.

Security Event of Default - User Meets The Company Credit Rating

5.4.6.2 In the case where a **User** meets **The Company Credit Rating** on signing a **Bilateral Connection Agreement** any of the following events shall constitute an **Event of Default**:-

- (a) If the **User** fails to provide or procure that there is provided to **The Company** within the requisite time any relevant security satisfactory to **The Company** pursuant to Part III of Section 2 or Paragraph 5.4.6.2(c) of the **CUSC**.
- (b) If having provided security satisfactory to **The Company** pursuant to Part III of Section 2 and Paragraph 5.4.6.2(c) of the **CUSC**:
  - (i) the **User** or any shareholder (whether direct or indirect) of the **User** or any other party who may at any time be providing security to **The Company** pursuant to the requirements of the **CUSC** (or the relevant **Bilateral Connection Agreement**) takes any action whether by way of proceedings or otherwise designed or calculated to prevent, restrict or interfere with the payment to **The Company** of any amount so secured whether or not there shall be a dispute between the parties;
  - (ii) any party who may at any time be providing security to **The Company** pursuant to the provisions of the **CUSC** (or the relevant **Bilateral Connection Agreement**) fails to pay to **The**

**Company** any sum demanded pursuant thereto.

- (c) (i) There is a material adverse change in the financial condition of the **User** such as to give **The Company** reasonable grounds for concluding that there is a substantial probability that the **User** will default in the payment of any sums due or to become due to **The Company** within the next following period of 12 months, in terms of or on termination of the relevant **Bilateral Connection Agreements**; or
- (ii) an event of default has occurred under any banking arrangements (as may be more particularly described in the relevant **Bilateral Connection Agreement**) (an event of default being for these purposes anything defined as such in such banking arrangements) put in place by the **User** in connection with a project for which security under this **CUSC** is required by **The Company** and as a result the banks who are party to such banking arrangement have taken steps to declare the principal of the advances under such arrangement immediately due and payable; or
- (iii) any other indebtedness of the **User** for the repayment of borrowed money (in a principal outstanding amount of not less than £1,000,000 (pounds sterling one million) or such greater figure specified in any **Bilateral Connection Agreement**) has become due and payable prior to the stated date of maturity thereof by reason of any default or breach on the part of the **User** and the amount in question has not been paid by the **User** or re-financed by the **User** within a period of 28 days following the date upon which it was so declared due and payable,

and in any of (i) or (ii) or (iii) the **User** fails, within a period of 7 (seven) days following the date on which **The Company** gives the **User** notice in writing of one or other of the above events occurring to provide **The Company** with such security as **The Company** shall require to cover the **User's** payment obligations to **The Company** arising in the event of or which have arisen prior to termination of the relevant **Bilateral Connection Agreement** and which arise under the **CUSC**. The security to be provided shall be in a form satisfactory to **The Company** in accordance with its then current policy and procedures and in such amount as **The Company** shall specify to the **User** in the aforesaid notice.

Provided that (in relation to Paragraphs (i) or (ii) or (iii) above) if at any time after the putting in place of security under this Paragraph the **User** shall produce to **The Company** evidence to **The Company's** reasonable satisfaction that there is not a substantial probability of the **User** not being able to make payment to **The Company** of such sums within the next following period of twelve (12) months, **The Company** shall not require the **User** to provide the aforesaid security and shall release any such security then in place. This waiver is without prejudice to **The Company's** right to require security at any time thereafter in the event of any of the circumstances set out in Paragraph (i) and/or (ii) and/or (iii) subsequently occurring.

Security Event of Default - User Does Not Meet The Company Credit Rating

5.4.6.3 In the case where a **User** does not meet **The Company Credit Rating** on signing a **Bilateral Connection Agreement** any of the following events shall constitute an **Event of Default**:-

- (a) (i) There is a material adverse change in the financial condition of the **User** such as to give **The Company** reasonable grounds for concluding that there is a substantial probability that the **User** will default in the payment of any unsecured sums due or to become due to **The Company** within the next period of 12 months, in terms of or on

termination of the relevant **Bilateral Connection Agreements**; or

- (ii) an event of default has occurred under any banking arrangements (as may be more particularly described in the relevant **Bilateral Connection Agreement**), (an event of default being for these purposes anything defined as such in such banking arrangements) put in place by the **User** in connection with a project for which security under this **CUSC** is required by **The Company** and as a result the banks who are party to such banking arrangement have taken steps to declare the principal of the advances under such arrangement immediately due and payable; or
- (iii) any other indebtedness of the **User** for the repayment of borrowed money (in a principal outstanding amount of not less than £1,000,000 (pounds sterling one million) or such greater amount specified in any **Bilateral Connection Agreement**) has become due and payable prior to the stated date of maturity thereof by reason of any default or breach on the part of the **User** and the amount in question has not been paid by the **User** or refinanced by the **User** within a period of 28 days following the date upon which it was so declared due and payable.

And in any one of (i) or (ii) or (iii) the **User** fails:-

- (aa) within a period of 14 (fourteen) days following the date on which **The Company** gives notice of such circumstances to provide to **The Company** a cash deposit in a **Bank Account**, a **Performance Bond** or a **Letter of Credit** in favour of **The Company** and **Valid** at least up to the last day of the **Financial Year** in which

the event occurs for such amount representing **The Company's** reasonable estimate of all unsecured sums to become due to **The Company** in the period up to the end of the **Financial Year** in which the event occurs such sum to be specified in the said notice; or

- (bb) to subsequently provide such cash deposit or renew such **Performance Bond** or **Letter of Credit** (or such renewed **Performance Bond** or **Letter of Credit** provided under this paragraph) not less than 45 days prior to its stated expiry date for such amount representing **The Company's** reasonable estimate of the unsecured sums to become due to **The Company** in the next following **Financial Year** valid at least up to the last day of the next following **Financial Year** and to continue the provision of cash deposit, a **Performance Bond** or **Letter of Credit** in a similar manner, to such estimate of unsecured sums.

Provided that regarding any one of (i) or (ii) or (iii) if at any time after the putting in place of security under this Paragraph 5.4.6.3(a) the **User** shall provide to **The Company** evidence to **The Company's** reasonable satisfaction that there is not a substantial probability of the **User** being unable to make payment to **The Company** of any unsecured sums within the next following period of twelve (12) months, **The Company** shall not require the **User** to provide the aforesaid security and shall release any such security then in place. This waiver is without prejudice to **The Company's** right to require security at any time thereafter in the event of any of the circumstances set out in paragraph (i) and/or (ii) and/or (iii) in this Paragraph 5.4.6.3(a) subsequently occurring.

- (b) If the **User** fails to provide or procure that there is provided to **The Company** or at any time fails to maintain or procure that there is maintained in full force and effect the relevant

security arrangement required under Part III of Section 2 or Paragraph 5.4.6.3(a) or to renew or revise such security or to substitute any security with the required replacement security or to maintain or procure that there is maintained in full force and effect any such renewed, revised or substituted security as so required or if the **User** is otherwise in breach of any of its obligations under Paragraph 2.22.

- (c) If the **User** or any shareholder (whether direct or indirect) of the **User** takes any action whether by way of proceedings or otherwise designed or calculated to prevent restrict or interfere with the payment to **The Company** of any amount so secured or seeks or permits or assists others to do so, whether or not there shall be a dispute between the parties.
- (d) If any party who may at any time be providing or holding security in favour of **The Company** pursuant to Part III of Section 2 or Paragraph 5.4.6.3(a) fails to pay **The Company** any sum demanded in any **Notice of Drawing** pursuant thereto.

#### 5.4.7 Specific Event of Default Disconnection

Once **The Company** has given a valid notice of an event of default pursuant to Paragraph 5.4.6 provided that the **Event of Default** is continuing **The Company** may give notice of termination to that **User** whereupon the relevant **Bilateral Agreement** or right to use the system shall terminate and:

- (a) **The Company** shall in relation to such an **Event of Default** of a **User** in relation to a **Connection Site**:
  - (i) **Disconnect** all the **User's Equipment** at the **Connection Site**; and
  - (ii) the **User** concerned shall remove any of the **User's Equipment** on, in the case of **Connection Sites** in England and Wales, **The Company's** or, in the case of **Connection Sites** in Scotland, **Relevant Transmission Licensee's** land (as appropriate) within six (6) months of the date of termination or such longer period as may be agreed between **The Company** or the **Relevant Transmission**

**Licensee** (as appropriate) and the relevant **User**; and

- (iii) in the case of **Connection Sites** in England and Wales, **The Company** shall remove and, in the case of **Connection Sites** in Scotland, **The Company** shall procure that the **Relevant Transmission Licensee** removes, any of the **Transmission Connection Assets** on the land of the **User** concerned within 6 months or such longer period as may be agreed between the **User** and **The Company** or the **Relevant Transmission Licensee** (as appropriate).

Such **User** shall (notwithstanding any longer time for payment which but for such termination the **User** may have for payment pursuant to the **CUSC** or the relevant **Bilateral Agreement**) within 14 days from the date of termination pay to **The Company** all amounts due and owing on the date of such termination and be liable to pay to **The Company Termination Amounts** and where termination occurs prior to the end of the TEC Period the AC Cancellation Charge applicable to the **Connection Site**, such payments to be made within 14 days of the date of **The Company's** invoice(s) in respect thereof;

- (b)
  - (i) **The Company** shall request the owner of any **Distribution System** to which the **User** is connected to **Disconnect** all 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;
  - (ii) **The Company** shall in relation to such an event of default of a **User** acting as a **Supplier** request the owner of the **Distribution System** to which any of that **User's Customer's** are connected to **Disconnect** such **User's Customer's**;
  - (iii) **The Company** shall in relation to such an **Event of Default** of a **User** acting as an **Interconnector User** or **Interconnector Error Administrator** request the relevant **Interconnector Owner** to cease or procure the cessation of the transfer of power across the

**Interconnector** by or on behalf of that **Interconnector User**; and

the **User** shall be obliged to pay to **The Company** forthwith the **Use of System Charges** due under the **CUSC** or the relevant **Bilateral Agreement** up to the end of the **Financial Year** in which **Termination** occurs and also, in the case of a **Bilateral Embedded Generation Agreement**, where termination occurs prior to the end of the **TEC Period** the **AC Cancellation Charge**.

## 5.5 **BALANCING SERVICES USE OF SYSTEM CHARGES: EVENTS OF DEFAULT**

### 5.5.1 Breaches

Notwithstanding any other provisions of this Paragraph 5.5 and/or Paragraph 5.3 of the **CUSC**, in relation to the payment of the **Balancing Services Use of System Charges** the following shall constitute breaches under the **CUSC** and/or the relevant **Bilateral Agreement**:-

- (a) the **User** in question shall fail to provide or maintain or renew in accordance with Paragraph 3.21 or Paragraph 9.22.3 (as appropriate) the requisite amount of **Security Cover**; or
- (b) the **User** shall fail to pay any sum payable by the **User** in respect of **Balancing Services Use of System Charges** to **The Company** within 3 **Business Days** of its due date; or
- (c) an event of default under Paragraph 5.3.1(b) of the **CUSC** has occurred provided always that the final Paragraph of Paragraph 5.3.1(b) of the **CUSC** referring to the provision of guarantees shall not apply.

### 5.5.2 Events of Default

Forthwith upon the occurrence of any of the breaches specified in Paragraph 5.5.1 then notwithstanding any other provisions of the **CUSC** or of any **Bilateral Agreement** to which the **User** is a party, and in addition to any rights it may have under the terms of the **CUSC**, **The Company** may upon reaching a bona fide conclusion that the reason for the failure by the **User** under

Paragraph 5.5.1 is other than an administrative or banking error (having taken into account representations if any of the **User** made within 24 hours after the request therefor is made to the **User** by **The Company**, which request **The Company** shall be obliged to make) by notice to the **User** declare such breach an event of default.

#### 5.5.3 Deenergisation by User

If **The Company** declares an **Event of Default** under Paragraph 5.5.2 the **User** shall forthwith and in compliance with the instructions of **The Company** or (in the case of any connection to a **User System**) the owner of the **User System** to which the **User's Customers** are connected, **Deenergise** itself and/or its **Customers** or in the case of a **User** acting as an **Interconnector User** or **Interconnector Error Administrator** cease or procure the cessation of the transport of power by or on behalf of that **User** across the **Interconnector** as the case may be.

#### 5.5.4 Deenergisation by The Company/User System Owner

If the **User** shall fail to take such action as is referred to in Paragraph 5.5.3 within 48 hours after the date of any such notice referred to therein **The Company** shall be entitled to:-

- (a) request the owner of the **User System** to which the **User's Customers** and/or the **User** are connected, to **Deenergise** the **User's Customers** and/or the **User** (as the case may be) and to use all reasonable endeavours to effect or (as the case may be) give instructions to give effect to such **De-energisation** as quickly as practicable having regard to all the circumstances affecting such **De-energisation** (including any operational difficulties and relevant **Licence** duties); and/or
- (b) **Deenergise** the **User's Equipment** or equipment for which the **User** is responsible (as defined in Section K of the **Balancing and Settlement Code**) at any **Connection Site(s)** which serves only the **User** or a customer of the **User**; and/or
- (c) where the **User** is an **Interconnector User** request the relevant **Interconnector Owner** to cease or procure the cessation of the transfer of power by or on behalf of the **User** across the **Interconnector**.

#### 5.5.5 BSUoS Event of Default

5.5.5.1 **The Company** may terminate the relevant **Bilateral Agreement** and all others to which the **User** is a party and revoke the **Use of System Supply Confirmation Notice** and **Use of System Interconnector Confirmation Notice** forthwith by notice to the **User** if:-

- (a) **The Company** has given a valid notice of default pursuant to Paragraph 5.5.2; and
- (b) such event of default remains unremedied at the expiry of the later of:-
  - (i) the period of 6 months from the date of such notice; and
  - (ii) where the **User** disputes bona fide the event of default and has promptly brought and is actively pursuing proceedings against **The Company** to determine the dispute, the date on which the dispute is resolved or determined.

Upon termination pursuant to this Paragraph the **User** shall pay to **The Company** the **Termination Amounts** calculated in accordance with the **Charging Statements** and, where it is within the TEC Period, the AC Cancellation Charge and shall disconnect all the **User's Equipment** at the **Connection Site** and:

- aa) the **User** concerned shall remove any of the **User's Equipment** on, in the case of **Connection Sites** in England and Wales, **The Company's** or, in the case of **Connection Sites** in Scotland, **Relevant Transmission Licensee's** land (as appropriate) within 6 months of the date of termination or such longer period as may be agreed between **The Company** or the **Relevant Transmission Licensee** (as appropriate) and the **User**; and
- bb) in the case of **Connection Sites** in England and Wales, **The Company** shall remove and, in the case of **Connection Sites** in Scotland, **The Company** shall procure that the **Relevant Transmission Licensee** removes, any of the **Transmission Connection Assets** on the land of the **User** concerned within 6 months or such longer period as may be agreed between the

**User and The Company or the Relevant Transmission Licensee** (as appropriate); and

- cc) the provisions of Paragraph 5.4.7 shall apply *mutatis mutandis*.

5.5.5.2 The service of a notice under Paragraph 5.5.5.1 and/or the expiry of a notice given under Paragraph 5.6 shall not relieve the **User** of its obligation under Paragraph 3.9.3 or Paragraph 9.10 or any **Bilateral Agreement** to which the **User** is a party to pay any outstanding **Balancing Services Use of System Charges** in respect of any **Settlement Day** which fell prior to the issue or expiry of (as the case may be) such a notice but for which the **Payment Date** fell after the date of the termination of the relevant **Bilateral Agreement** (or use of system not subject to a **Bilateral Agreement**).

## 5.6 NOTICE TO DISCONNECT

Without prejudice to Paragraph 5.2.2, each **User** shall, as between **The Company** and that **User**, give to **The Company** not less than 6 months written notice of any intention of the **User** to **Disconnect** the **User's Equipment**.

## 5.7 DISCONNECTION

5.7.1 If notice to **Disconnect** is given by the **User** under Paragraph 5.6 hereof the **User** may upon expiry of the period specified in such notice and not before **Disconnect** the **User's Equipment**. At the expiry of such period the relevant **Bilateral Agreement** shall terminate and the following provisions shall apply.

5.7.2 The **User** shall be liable forthwith on the date the relevant **Bilateral Agreement** so terminates to pay to **The Company**:-

- (a) **Connection Charges** and/or **Use of System Charges** to the end of the **Financial Year** in which termination occurs all such charges becoming immediately due and payable upon the termination of the relevant **Bilateral Agreement**; and
- (b) **Termination Amounts** applicable to the **Connection Site**; and
- (c) where it is within the TEC Period, the AC Cancellation Charge

such payments to be made within 28 (twenty eight) days of the date of **The Company 's** invoice in respect thereof.

5.7.3 Within 6 months of the date of such termination or such longer period as may be agreed between **The Company** and the **User** in the case of **Connection Sites** in England and Wales, and/or between the **Relevant Transmission Licensee** and the **User** in the case of **Connection Sites** in Scotland:

- (a) the **User** shall remove any of the **User's Equipment** on, in the case of **Connection Sites** in England and Wales, **The Company's** or, in the case of **Connection Sites** in Scotland, **Relevant Transmission Licensee's** land (as appropriate); and
- (b) in the case of **Connection Sites** in England and Wales, **The Company** shall remove and, in the case of **Connection Sites** in Scotland, **The Company** shall procure that the **Relevant Transmission Licensee** removes, any of the **Transmission Connection Assets** on the land of the **User** concerned.

## 5.8 Not Used

## 5.9 NON-EMBEDDED CUSTOMERS

5.9.1 This Paragraph 5.9 provides for additional **Deenergisation** provisions which only apply in relation to **Users** acting in their category of connection and/or use as **Non-Embedded Customers**.

5.9.2 If the following condition ceases to be satisfied in respect of the **Supplier** supplying the **Connection Site** **The Company** may give written notice of that fact to the **User** and unless within 5 days of receipt of such notice the **User** advises **The Company** that it has contracted with an alternative **Supplier**, **The Company** shall be entitled to **Deenergise the Non-Embedded Customer's User's Equipment**:-

“the **Supplier** being authorised by a current **Supply Licence** to supply electricity to the premises to be supplied with electricity through the **Connection Site**.”

5.9.3 If there ceases to be a subsisting right of **Use of System** by a **Supplier** at the **Connection Site** who is liable to **The Company** for **Use of System Charges** in respect of **Demand** attributable to the **Connection Site**, **The Company** shall be entitled to **Deenergise the User's Equipment**.

5.9.4 Where:

- (a) the **Supplier** is in breach of the **CUSC** relating to the supply to the **Connection Site** and accordingly **The Company** is permitted under the **CUSC** to **Deenergise** the **User's Equipment**; or
- (b) an **Event of Default** under Paragraph 5.6 has occurred in relation to the **Supplier** with whom the **User** has a **Supply Agreement** and the relevant event is still continuing or the relevant circumstances still exist,

**The Company** may **Deenergise** the **User's Equipment** upon the expiry of at least 48 hours prior written notice to the **User** provided that at the time of expiry of such notice the breach concerned remains unremedied or (as the case may be) the reason permitting **Deenergisation** continues or the relevant **Event of Default** is still continuing and neither **The Company** nor the **Supplier** has referred the matter to the **Dispute Resolution Procedure**. In such event, **The Company** may **Deenergise** the **User's Equipment** forthwith following completion of the **Dispute Resolution Procedure** and final determination of the dispute in **The Company's** favour.

- 5.9.5 If a breach of the nature referred to in Paragraph 5.9.4 continues to the extent that it places or seriously threatens to place in the immediate future **The Company** in breach of the **Transmission Licence** and/or places or seriously threatens to place in the immediate future any **Relevant Transmission Licensee** in breach of its transmission licence, **The Company** may **Deenergise** the **Non-Embedded Customer's Equipment** at the **Connection Site** upon the expiry of at least five (5) **Business Days** prior written notice to the **User**, provided that at the time of expiry of such notice the breach concerned remains unremedied.

## 5.10 RELEVANT INTERRUPTIONS

- 5.10.1 In the event of a **Relevant Interruption** where the **Affected User** has not otherwise received compensation under the **Balancing and Settlement Code** **The Company** shall be liable to pay the **Affected User** upon request the **Interruption Payment** for the **Interruption Period**.
- 5.10.2 The **Interruption Payment** shall be paid by **The Company** to the **Affected User** within 28 days of the date of agreement as to the amount of the **Interruption Payment**.
- 5.10.3 The **Affected User** will take all reasonable steps to minimise the effect (and therefore the amount of the **Interruption**

**Payment** sought as a consequence) of the **Relevant Interruption** on the operation of its business.

5.10.4 **The Company** shall as soon as reasonably practicable after the end of the **Interruption Period** notify the **Affected User** where the **Relevant Interruption** was in accordance with an **Emergency Deenergisation Instruction**.

**END OF SECTION 5**

## **Proposed Amendments to CUSC Section 6 under CAP 165 (Finite Long Term Entry Rights)**

**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).

### ***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.

### ***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 165 (Finite Long Term Entry Rights and LCN)

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 Period~~ specified 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**.

*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** 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** 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**

**Not used, removed on 15<sup>th</sup> February 2007, dedicated to Transitional Issues** |

**CONTENTS**

[Part 1 **Not Used**

Part 3 **Not Used**

Part 3 **CUSC AMENDMENT PROPOSAL 165**

## Part 3

### 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 165** (Finite Long Term Entry Rights) which introduces the concept of a **Local Capacity Nomination** which forms the basis of a **User's** right to **Use of System** and provides for **Transmission Entry Capacity** to be temporally defined.

10.1.2 The **Access Amendment Proposal** affects **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:

- (a) the term "**Access Amendment Proposal**", shall mean **CUSC Amendment Proposal 165** (Finite Long Term Entry Rights);
- (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 "**Agreed TEC Period**", shall mean a **TEC Period** which is different from the **Default TEC Period** and which has been agreed by **The Company** and the **User**;
- (d) 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**;
- (e) the term "**Application and Offer Amendments**", shall mean those amendments to **CUSC** Exhibits B, C, D and E proposed by the **Access Amendment Proposal**;
- (f) 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 the new Exhibit 3 (Construction Agreement) proposed by the **Access Amendment Proposal**;

- (g) 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**;
- (h) the term “**Default TEC Period**” shall mean
  - (i) for **Existing CUSC Agreements**, **8 Financial Years** (including, if it falls within a **Financial Year**, the **Financial Year** in which the **LCN Implementation Date** occurs) from the **LCN Implementation Date**; and
  - (ii) for **New CUSC Agreements**, **8 Financial Years** from the relevant **Completion Date** or **Charging Date** (as appropriate) as set out in the **Construction Agreement**;
- (i) 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**;
- (j) the term “**Existing Final Sums/User Commitment Arrangements**” shall mean the existing provisions for payment on termination as set out in a **New CUSC Agreement**;
- (k) the term “**LCN Implementation Date**” shall mean the **Implementation Date** for the **Access Amendment Proposal** (unless it is provided to be different in relation to a particular provision),
- (l) 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;

- (m) 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**;
- (n) the term “**Outstanding Applications**”, shall mean an offer yet to be made 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** at the **Relevant Date** but where the application was made prior to the **Relevant Date**;
- (o) 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
- (p) the term “**Relevant Date**” means the day on which the **Access Amendment Proposal** 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:

- (a) 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 AND TEC PERIOD

### *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
- (b) where it wants the **TEC Period** to be for a higher or lower number of **Financial Years** than the **Default TEC Period**; 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 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**” and “**TEC Period**” in the manner provided for in the **Bilateral Agreement Amendments**;
- (d) the **Local Capacity Nomination** is the **Default LCN** or **Agreed LCN** as appropriate; and
- (e) the **TEC Period** is the **Default TEC Period** or **Agreed TEC Period** 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**:

- (a) where it wants the **Local Capacity Nomination** to be at a higher or lower MW volume than the **Default LCN**; and/or
- (b) where it wants the **TEC Period** to be for a higher number of **Financial Years** than the **Default TEC Period**; and/or
- (c) 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/or
- (d) those **New CUSC Agreements**; where it wants to continue on the **Existing Final Sums/User Commitment Arrangements**; 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 Nomination**” and “**TEC Period**” 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) the **TEC Period** is the **Default TEC Period** or **Agreed TEC Period** as appropriate;
- (f) and the relevant Clauses and Appendices within the **Construction Agreement** are amended in the manner provided for (and in the

case of the existing **Construction Agreement**, so that it is consistent with the new Exhibit) 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, what **TEC Period** it requires and 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, what **TEC Period** it requires and 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**.

#### ***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 **Offers** in a form and manner consistent with the **Application and Offer Amendments and Bilateral Agreement Amendments**.

END OF SECTION 10

## Sec 11 Proposed New and Amended Defined Terms (WGAA1)

<b>“Access Capacity”:</b>	the sum of a <b>User’s TEC</b> and <b>Short Term Access Products</b> (if any);
<b>“AC Cancellation Charge”:</b>	that element of the <b>Cancellation Charge</b> payable in the event of termination of a <b>Bilateral Connection Agreement</b> or <b>Bilateral Embedded Generation Agreement</b> after it is <b>Commisioned</b> and connected to or using the <b>GB Transmission System</b> as calculated in accordance with <b>CUSC</b> Schedule 4 Part 1;
<b>“BC Cancellation Amount”:</b>	that element of the <b>BC Cancellation Charge</b> payable in the event of termination of a <b>Construction Agreement</b> and associated <b>Bilateral Connexction Agreement</b> or <b>Bilateral Embedded Generation Agreement</b> on or after the <b>Trigger Date</b> but before the <b>Completion Date</b> within such <b>Construction Agreement</b> as calculated in accordance with Part 1 of the <b>User Commitment Principles</b> and in relation to a particular <b>User</b> as defined in its <b>Construction Agreement</b> ;
<b>“BC Cancellation Charge”:</b>	that element of the <b>Cancellation Charge</b> payable in the event of termination of a <b>Construction Agreement</b> and associated <b>Bilateral Connexction Agreement</b> or <b>Bilateral Embedded Generation Agreement</b> prior to the <b>Completion Date</b> within such <b>Construction Agreement</b> as calculated in accordance with Part 1 of the <b>User Commitment Principles</b> and in relation to a particular <b>User</b> as defined in its <b>Construction Agreement</b> ;
<b>“BC Security Period”</b>	means the relevant <b>Cancellation Period</b> .
<b>“Cancellation Charge”</b>	the charge payable on termination of a <b>Bilateral Connection Agreement</b> or <b>Bilateral Embedded Generation Agreement</b> or <b>Construction Agreement</b> as calculated in accordance with the <b>User Commitment Principles</b> ;
<b>“Cancellation Period(s)”</b>	the period(s) as set out in a <b>User’s Construction Agreement</b> by reference to which the <b>Cancellation Charge</b> payable is identified.
<b>“Capacity Reduction Charge”:</b>	the charge payable on a reduction in <b>LCN</b> and/or <b>TEC</b> as calculated in accordance with the Part 2 of the <b>User Commitment Principles</b> ;
<b>“LCN/TEC Register”</b>	the register set up by <b>The Company</b> pursuant to Section 3 Appendix 3 Paragraph 2.4;
<b>“Effective LCN Decrease Date”:</b>	the date as defined in Paragraph 1.4.3 of Appendix 3 of Section 3 of the <b>CUSC</b> ;
<b>“Effective TEC Decrease Date”:</b>	the date as defined in Paragraph 2.2.3 of Appendix 3 of Section 3 of the <b>CUSC</b> ;
<b>“First FS Security Period”</b>	means the period from and including the day of signing of the

	<b>Construction Agreement</b> until the next following 31 <sup>st</sup> March or 30 <sup>th</sup> September (whichever shall first occur).
<b>"FS Security Period"</b>	means the <b>First FS Security Period</b> and the <b>Subsequent FS Security Period</b> .
<b>"LCN Transmission Reinforcement Works"</b> :	those <b>Transmission Reinforcement Works</b> that are required from the <b>Node</b> to connect in to a <b>MITS Substation</b> , inclusive of substation works, a substation with more than 4 <b>Transmission Circuits</b> connecting at the substation and in relation to a particular <b>User</b> as defined in its <b>Construction Agreement</b> .
<b>"Local Capacity Nomination" or "LCN"</b> :	the station capacity (in whole MW) being the maximum figure at which a <b>User</b> can export power onto the <b>GB Transmission System</b> at a <b>Node</b> , and which, in relation to a <b>User</b> acting in the category of a <b>Power Station</b> directly connected to the <b>GB Transmission System</b> , must never exceed its <b>Connection Entry Capacity</b> ;
<b>"MITS Substation"</b>	means a substation at a <b>Grid Supply Point</b> with 2 or more <b>Transmission Circuits</b> connecting at the substation.
<b>"Node"</b> :	Shall mean: (a) in the case of a <b>User</b> acting in the category of a <b>Power Station</b> directly connected to the <b>GB Transmission System</b> , the <b>Connection Site</b> specified in a <b>User's Bilateral Connection Agreement</b> ; and (b) in the case of a <b>User</b> acting in the category of an <b>Embedded Power Station</b> , the <b>Grid Supply Point</b> that can be reasonably associated with the <b>Embedded</b> generation site specified in a <b>User's Bilateral Embedded Generation Agreement</b> .
<b>Payment Obligation</b>	means the <b>User's obligation to pay Final Sums and the BC Cancellation Charge to The Company</b> upon termination of its <b>Construction Agreement</b> .
<b>"Security Period"</b>	shall mean the <b>FS Security Period and/or BC Security Period</b> as appropriate.
<b>"Short Term Access Products"</b> :	any of the following products: the <b>STTEC, LDTEC and Temporary TEC</b> ;
<b>"Short Term Access Products Charge"</b> :	the element of <b>Use of System Charges</b> payable by a <b>User</b> arising out of a <b>User's Use of System</b> by means of a <b>Short Term Access Product</b> ;
<b>"TEC Decrease Notice Period"</b> :	the notice period required pursuant to Paragraph 2.2 of Appendix 3 to Section 3 of the <b>CUSC</b> ;
<b>"Subsequent FS"</b>	means each subsequent period of six calendar months commencing

<b>Security Period</b>	on the last day of the <b>First FS Security Period</b> and continuing until the <b>Construction Agreement</b> is terminated and the <b>Final Sums</b> and/or <b>BC Cancellation Charge</b> shall have been paid .
<b>“TEC Period”</b> :	the period in whole <b>Financial Years</b> allocated to a <b>User</b> during which the <b>User</b> can export onto the <b>GB Transmission System</b> utilising <b>TEC</b> and which is specified in Appendix C of a <b>User’s Bilateral Connection Agreement</b> or <b>Bilateral Embedded Generation Agreement</b> ;
<b>“Transmission Circuit”</b>	as defined in the <b>GBSQSS</b> ;
<b>“Trigger Date”</b>	the date, on which the <b>BC Cancellation Charge</b> is calculated on the basis of the <b>BC Cancellation Amount</b> instead of the <b>User Commitment Amount</b> and which , in relation to a particular <b>User</b> as defined in its <b>Construction Agreement</b> ;
<b>“User Commitment Amount”</b> :	that element of the <b>BC cancellation Charge</b> payable in the event of termination of a <b>Construction Agreement</b> and associated <b>Bilateral Connexion Agreement</b> or <b>Bilateral Embedded Generation Agreement</b> before the <b>Trigger Date</b> within such <b>Construction Agreement</b> as calculated in accordance with Part 1 of the <b>User Commitment Principles</b> and in relation to a particular <b>User</b> as defined in its <b>Construction Agreement</b> ;
<b>“User Commitment Principles”</b>	the principles applied by <b>The Company</b> in the application and calculation of a <b>User’s Cancellation Charge</b> and/or <b>Capacity Reduction Charge</b> such principles being set out in <b>CUSC Schedule 4</b> .

## 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;
Definitions of "Bi annual Estimate" and "Secured Amount Statement"	Amend to include reference to Schedule 4

**SCHEDULE 2 - EXHIBIT 1**

**DATED [ \_\_\_\_\_ ]**

**NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)**

**and**

**[ \_\_\_\_\_ ] (2)**

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**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: [ \_\_\_\_\_ ]**

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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
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  - [10. Restrictions on availability] (power station with Design Variation only)
  11. Term
  12. Variations
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- Appendix C **Connection Entry Capacity, Local Capacity Nomination and Transmission Entry Capacity and TEC Period (Power Stations and Interconnector Owners)**
- Appendix F1 **Site Specific Technical Conditions - Agreed Balancing Services**
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**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 defined in the **Construction Agreement**.-

]

[**"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 the Connection rights granted pursuant to 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** at the Node up to the User's Local Capacity Nomination shall commence on and **Use of System Charges** shall be payable by the **User** from the ~~[CUSC Implementation Date]~~ [or] [Charging Date.]

5.2 The right to use the **GB Transmission System** by means of the **Transmission Entry Capacity** shall cease at the end of the **TEC Period**.

## 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 AND TEC PERIOD

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 and TEC Period** 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 ~~prepared~~ **prepare** 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 Capacity~~ **LCN 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 ~~10.2, 10.3~~12.2, 12.3 and ~~10.4~~12. 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:** [ ]

Type: [ ]

Part 1 - Pre-Vesting Assets

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

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

<u>Allocation</u>	<u>Description</u>	<u>Age</u> (As at [ ])	<u>Year</u>
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(\*) 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 of main and reserve busbars follows ownership of section switches.

Diagram Reference: [ ]

Appendix Reference: [ ]

Agreement Reference: [ ]

**APPENDIX B****CONNECTION CHARGES/PAYMENT**

Company: []

Connection Site: []

Type: []

**(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 £[] where

Rate of Return = []%

**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 £[] where

Rate of Return = []%

**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 £[ ]

**Part 4 - Miscellaneous Charges**

The miscellaneous charge shall be £[ ] 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 £[ ] 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.**

**LCN (MW)**  
**Power Station**

**Part 3 Transmission Entry Capacity**

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

TEC(MW)	
Power Station	[       ]

**TEC Period:** [x] whole Financial Years from [and including the Financial Year in which it falls] the **Charging Date/Completion Date**

**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  
AND TEC PERIOD**

Company:

Connection Site:

**Part 1 Connection Entry Capacity**

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

Interconnector CEC(MW)  
[       ]

**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.**

**LCN (MW)  
Interconnector**

**Part 3 Transmission Entry Capacity**

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

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**

**APPENDIX FI**

**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**

**END OF SCHEDULE 2 - EXHIBIT 1**

**SCHEDULE 2 - EXHIBIT 2**

**DATED [ \_\_\_\_\_ ]**

**NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)**

**and**

**[ \_\_\_\_\_ ] (2)**

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**THE CONNECTION AND USE OF SYSTEM CODE  
BILATERAL EMBEDDED GENERATION AGREEMENT**

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**[USE OF SYSTEM FOR AN EMBEDDED POWER STATION]  
[USE OF SYSTEM FOR A SMALL POWER STATION TRADING PARTY]  
[DISTRIBUTION INTERCONNECTOR OWNER]**

**At [ \_\_\_\_\_ ]**

**Reference: [ \_\_\_\_\_ ]**

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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.

[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

**5.1** The right to use the **GB Transmission System at the Node up to the User's Local Capacity Nomination** shall commence on and **Use of System Charges** shall be payable by the **User** from the date hereof.

**5.2** The right to use the **GB Transmission System by means of the Transmission Entry Capacity** shall cease at the end of the **TEC Period**.

#### 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 and TEC Period** of ~~[at each of the] site[s] of Connection~~ **Node** 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** prior to any alteration in the **BM Unit Identifiers** and **The Company** shall prepare 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 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** 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.

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 F1**  
**SITE SPECIFIC TECHNICAL CONDITIONS:**  
**AGREED BALANCING SERVICES**

**APPENDIX F2**

**[NOT USED]**

**APPENDIX F2**

**SITE SPECIFIC TECHNICAL CONDITIONS:**

**SPECIAL AUTOMATIC FACILITIES**

**APPENDIX F3**

**SITE SPECIFIC TECHNICAL CONDITIONS: PROTECTION**

**AND CONTROL RELAY SETTINGS**

**FAULT CLEARANCE TIMES**

**APPENDIX F4**

**SITE SPECIFIC TECHNICAL CONDITIONS:**

**OTHER**

**END OF SCHEDULE 2 - EXHIBIT 2**

**SCHEDULE 2 EXHIBIT 3 PART [x]**

**INDICATIVE**

**DATED [ ] 200[1]**

**NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)**

**and**

**[ ] (2)**

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**THE CONNECTION AND USE OF SYSTEM CODE**

**CONSTRUCTION AGREEMENT**

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***Proforma for Power Station Directly Connected to the GB Transmission System and Embedded Power Stations which are the subject of a BEGA***

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*[this will set out the BC Cancellation Charges as calculated in accordance with User Commitment Principles, the profile of the charge and from that the cancellation periods.]*

**THIS CONSTRUCTION AGREEMENT** is made on the [ ] day of [ ] 200[1]

**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** has prepared 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 to its connection to] [or use of] the **GB Transmission System** and pursuant to Standard Condition C8 of the **Transmission Licence**, **The Company** is required to offer terms in accordance with the **CUSC** in this respect or [specific recital to reflect that the **Construction Agreement** is an amendment of an existing signed offer pursuant to the **CUSC** amending documents]
- (C) **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).
- (D) Certain works are required as part of this offer as set out in this **Construction Agreement**. These works are required for the purposes of the [Local Capacity Nomination] [Local Capacity Nomination and Transmission Entry Capacity].
- (E) This **Construction Agreement** is entered into pursuant to the terms of the **CUSC**.

**NOW IT IS HEREBY AGREED** as follows:

**1. 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** and in

the Bilateral Connection Agreement have the same meanings, interpretations or constructions in this **Construction Agreement**.

"Authority"	as defined in the <b>CUSC</b> .
"Bilateral Connection Agreement"	the <b>Bilateral Connection Agreement</b> entered into between the parties on even date herewith.
"Backstop Date"	the date specified as such in the <b>Construction Programme</b> .
"BC Cancellation Charge"	the <b>User Commitment Amount</b> or <b>BC Cancellation Amount</b> as appropriate.
"Bilateral Embedded Generation Agreement"	the <b>Bilateral Embedded Generation Agreement</b> entered into between the parties on even date herewith.
"BC Cancellation Amount"	the sum calculated in accordance with the <b>User Commitment Principles</b> payable by the <b>User</b> on termination of this <b>Construction Agreement</b> on or after the <b>Trigger Date</b> such sum being that specified in the Table in Appendix R by reference to the <b>Cancellation Period</b> in which this <b>Construction Agreement</b> is terminated.
Cancellation Period(s)"	the [periods] [ <b>Financial Years</b> ] identified within the <b>Cancellation Charge</b> profile and specified in Appendix R.
"Capacity Reduction Charge"	the sum calculated in accordance with the <b>User Commitment Principles</b> payable by the <b>User</b> under Clause 2.17 and Clause 7 in respect of a reduction in <b>LCN</b> and/or <b>TEC</b> prior to the <b>Completion Date</b> .
"Charging Date"	the date upon which the <b>Construction Works</b> are first <b>Commissioned</b> and available for use by the <b>User</b> or if the

**Independent Engineer** before, on or after the **Commissioning Programme Commencement Date** shall have certified in writing that the **Transmission Connection Assets**, are completed to a stage where **The Company** could commence commissioning and by such date the **User's Works** shall not have been so certified then the date falling [ ] days after the date of such certification, provided that the [Transmission Reinforcement Works] [LCN Transmission Reinforcement Works] are **Commissioned** and **Seven Year Statement Works** are completed as at that date. In the event that the [Transmission Reinforcement Works] [LCN Transmission Reinforcement Works] are not so **Commissioned** and/or the **Seven Year Statement Works** are not so completed the **Charging Date** shall be the date on which they are **Commissioned** and/or completed as appropriate.

“Commissioning Programme Commencement Date”

the date specified in the **Construction Programme** for the commencement of the **Commissioning Programme** or any substituted date fixed under the terms of this **Construction Agreement**

“Commissioning Programme”

the sequence of operations/tests necessary to connect the **User's Works** and the **Transmission Connection Asset Works/LCN Transmission Reinforcement Works** to the **GB Transmission System** for the purpose of making the **User's Works** available for operation to be determined pursuant to Clause 2.10 of this **Construction Agreement**.

“Completion Date”

[ ] or such other date as may be agreed in terms of this **Construction Agreement**.

"Connected Planning Data"	data required pursuant to the <b>Planning Code</b> which replaces data containing estimated values assumed for planning purposes by validated actual values and updated estimates for the future and by updated forecasts for forecast data items.
"Consents"	in relation to any <b>Works</b> :-  (a) all such planning and other statutory consents; and (b) all wayleaves, easements, rights over or interests in land or any other consent; or (c) permission of any kind as shall be necessary for the construction of the <b>Works</b> and for commencement and carrying on of any activity proposed to be undertaken at or from such <b>Works</b> when completed.
"Construction Programme"	the agreed programme for the <b>Works</b> to be carried out by <b>The Company</b> and the <b>User</b> set out in detail in Appendix [J] to this <b>Construction Agreement</b> or as amended from time to time pursuant to Clauses 2.3 and 3.2 of this <b>Construction Agreement</b> .
"Construction Site"	the site where the <b>Transmission Connection Asset Works</b> are being undertaken by or on behalf of <b>The Company</b> ;
"Construction Works"	the <b>Transmission Connection Asset Works, Transmission Reinforcement Works, Seven Year Statement Works</b> and <b>One Off Works</b> and such additional works as are required in order to comply with any relevant <b>Consents</b> relating to any such works but excluding for the avoidance of doubt any <b>Third Party Works</b> .

"Dispute Resolution Procedure"	the procedure for referral to arbitration set out in Paragraph 7.4 of the <b>CUSC</b> .
"Event of Default"	any of the events set out in Clause 10 of this <b>Construction Agreement</b> as constituting an event of default.
"Final Sums"	<p>the amount payable by the <b>User</b> on termination of this <b>Construction Agreement</b> being the aggregate from time to time and for the time being of:-</p> <ol style="list-style-type: none"><li>(1) all <b>The Company Engineering Charges</b> arisen prior to the date of termination;</li><li>(2) fees, expenses and costs (excluding costs on account of interest charges incurred by <b>The Company</b>) of whatever nature reasonably and properly incurred or due by <b>The Company</b> in respect of any part of the <b>One Off Works</b> carried out prior to the date of termination of this <b>Construction Agreement</b>;</li><li>(3) fees, expenses and costs properly payable by <b>The Company</b> in respect of, or arising from the termination by it or any third party of any contract for or relating to the carrying out of any <b>One Off Works</b> provided it is negotiated on an arms length basis (including any such arising under the <b>STC</b>);</li><li>(4) fees, expenses and costs due in accordance with Clause 2.4.1; and</li><li>(5) interest on any such amounts from the date they were paid by <b>The Company</b> to the date of <b>The Company's</b> invoice at 2% over <b>Base Rate</b> from time to time and</li></ol>

for the time being.

Any dispute as to the amount of **Final Sums** shall be referred to arbitration in accordance with the **Dispute Resolution Procedure**.

["Independent Engineer"]

the engineer specified in Appendix L to this **Construction Agreement**. Provided that:-

- (a) where the parties fail to agree on a suitable engineer within 120 days of the date of this **Construction Agreement**; or
- (b) where any **Independent Engineer** appointed from time to time shall fail, refuse or cease to act in the capacity set out herein and no substitute engineer of suitable standing and qualification can be agreed by the parties within 30 days;

then such engineer as the President of the Institution of Engineering and Technology shall, on the application of either party, nominate shall be the **Independent Engineer**.

"Liquidated Damages"

the sums specified in or calculated pursuant to Appendix K to this **Construction Agreement**.

"LCN Transmission Reinforcement Works"

those works other than the **Transmission Connection Asset Works, Seven Year Statement Works and One Off Works**, which in the reasonable opinion of **The Company** are necessary to extend or reinforce the **GB Transmission System** in relation to and prior to the operation of the **User's Equipment** at the **Connection Site** for the purposes of its **Local Capacity**

	<b>Nomination</b> and which are specified in Appendix H Part 1 to this <b>Construction Agreement</b> .
“Notice of Intent”	the notice issued by <b>The Company</b> pursuant to Clause 7.4.4
“Notice of Reduction”	the notice issued by <b>The Company</b> pursuant to Clause 7.4.7 including a revised Appendix C specifying the revised <b>Local Capacity Nomination</b> and/or <b>Transmission Entry Capacity</b> .
“One Off Works”	the works described in Appendix B1 to this <b>Construction Agreement</b> .
“Preliminary Request”	the request issued by <b>The Company</b> pursuant to Clause 7.4.1.
“Reduction Fee”	the fee payable by the <b>User</b> to <b>The Company</b> in respect of the agreement to vary issued pursuant to Clause 7.4.9 such fee being calculated on the same basis as that set out in the <b>Charging Statements</b> as payable on a payment of actual costs basis in respect of a <b>Modification Application</b> .
“Seven Year Statement Works”	the works set out in Table B2 of the statement prepared by <b>The Company</b> pursuant to Standard Condition C11 of the <b>Transmission Licence</b> and issued by <b>The Company</b> in [ ] which in <b>The Company’s</b> reasonable opinion are required to be completed before the <b>Completion Date</b> to ensure that the <b>GB Transmission System</b> complies with the requirements of Standard Condition C17 of the <b>Transmission Licence</b> and Standard Condition D3 of any <b>Relevant Transmission Licensee’s</b> transmission licence prior to the <b>Connection</b> of the <b>User’s Equipment</b> in terms of Clause 7.1 [or 7.2] of this <b>Construction Agreement</b> .
“TEC Transmission	those works other than the

Reinforcement Works”	<b>Transmission Connection Asset Works, Seven Year Statement Works and One Off Works</b> , which in the reasonable opinion of <b>The Company</b> are necessary to extend or reinforce the <b>GB Transmission System</b> in relation to and prior to the operation of the <b>User’s Equipment</b> at the <b>Connection Site</b> for the purposes of its <b>Transmission Entry Capacity</b> and which are specified in Appendix H Part 2 to this <b>Construction Agreement</b> .
“Term”	the term of this <b>Construction Agreement</b> commencing on the date hereof and ending in accordance with Clause 12.
“Third Party Works”	the works to be undertaken on assets belonging to a party other than <b>The Company</b> and the <b>User</b> to enable it to provide or as a consequence of the connection to and/or use of the <b>GB Transmission System</b> by the <b>User</b> as specified in Appendix N;
“Transmission Connection Assets”	the assets specified in Appendix A to the <b>Bilateral Connection Agreement</b> .
“Transmission Connection Asset Works”	the works necessary for construction and installation of the <b>Transmission Connection Assets</b> at the <b>Connection Site</b> specified in Appendix G to this <b>Construction Agreement</b> .
“Transmission Reinforcement Works”	the <b>LCN Transmission Reinforcement Works</b> and <b>TEC Transmission Reinforcement Works</b> .
“Trigger Date”	the date specified as such in Appendix R as it may be amended from time to time under the provisions of this <b>Construction Agreement</b> .
“User Commitment Amount”	the sum calculated in accordance with

	the <b>User Commitment Principles</b> payable by the <b>User</b> on termination of this <b>Construction Agreement</b> prior to the <b>Trigger Date</b> such sum being that specified in the Table in Appendix R by reference to the <b>Cancellation Period</b> in which this <b>Construction Agreement</b> is terminated.
“User Commitment Principles”	the methodology relating to the application and calculation of the <b>BC Cancellation Charge</b> and <b>Capacity Reduction Charge</b> set out in <b>CUSC</b> Schedule 4 as it may be amended from time to time.
“User’s Works”	those works necessary for installation of the <b>User’s Equipment</b> which are specified in Appendix I to this <b>Construction Agreement</b> .
“Works”	the <b>Construction Works</b> and the <b>User’s Works</b> .

## 2. CARRYING OUT OF THE WORKS

- 2.1 Forthwith following the date of this **Construction Agreement** (i) in respect of **Connection Sites** in England and Wales **The Company** and the **User** shall agree the **Safety Rules** and **Local Safety Instructions** to apply during the **Construction Programme** and **Commissioning Programme**; and (ii) in respect of **Connection Sites** in Scotland the **User** shall agree with the **Relevant Transmission Licensee** the **Safety Rules** and **Local Safety Instructions** to apply during the **Construction Programme** and **Commissioning Programme**. Failing agreement within three months of the date of this **Construction Agreement** the matter shall be referred to the **Independent Engineer** for determination in accordance with Clause 6 of the **Construction Agreement**.
- 2.2 Subject to Clauses 2.3 and 2.4 of this **Construction Agreement** forthwith following the date of this **Construction Agreement** **The Company** shall use its best endeavours to obtain in relation to the **Construction Works**, and the **User** shall use its best endeavours to obtain in relation to the **User's Works**, all **Consents**. Each shall give advice and assistance to the other to the extent reasonably required by the other in the furtherance of these

obligations. Further, each party shall, so far as it is legally able to do so, grant to, in relation to **Connection Sites** in England and Wales, the other, or in relation to **Connection Sites** in Scotland, the **Relevant Transmission Licensee**, all such wayleaves, easements, servitude rights, rights over or interests (but not estates as regards land in England and Wales and not heritable or leasehold interests as regards land in Scotland) in land or any other consents reasonably required by the other or the **Relevant Transmission Licensee** in order to enable the **Works** to be expeditiously completed and to enable that other to carry out its obligations to the other under this **Construction Agreement** and in all cases subject to such terms and conditions as are reasonable.

2.3 The following additional provisions shall apply in respect of the **Consents** and **Construction Works**:-

2.3.1 All dates specified in this **Construction Agreement** are subject to **The Company** obtaining **Consents** for the **Construction Works** in a form acceptable to it within the time required to carry out the **Construction Works** in accordance with the **Construction Programme**.

2.3.2 In the event of:-

- (a) the **Consents** not being obtained by the required date; or
- (b) the **Consents** being subject to conditions which affect the dates; or
- (c) **The Company** wishing to amend the **Construction Works** to facilitate the granting of the **Consents**,

**The Company** shall be entitled to revise the **Construction Works** (and as a consequence Appendix A to the **Bilateral Connection Agreement**) and Appendix R to and all dates specified in this **Construction Agreement** and the charges specified in Appendix B to the **Bilateral Connection Agreement**. For the avoidance of doubt such revisions shall be at **The Company's** absolute discretion and the consent of the **User** is not required.

2.3.3 The **User** shall be regularly updated by **The Company** in writing or by such other means as the parties may agree as to progress made by **The Company** from time to time in the obtaining of relevant **Consents** pursuant to its obligations under Clause 2.2 or 2.3 of this **Construction Agreement**.

2.4.1 The **User** shall be liable to pay to **The Company** as part of any **Final Sums** due:-

- (a) all **The Company 's Engineering Charges** accrued; and
- (b) proper and reasonable out-of-pocket expenses incurred and/or paid or which **The Company** is legally bound to incur or pay

in seeking and obtaining the **Consents** the subject of Clause 2.2 of this **Construction Agreement** in respect of the **One off Works**.

The **User** acknowledges these out of pocket ancillary expenses may include planning inquiries or appeals. **The Company** shall keep the **User** informed of the level of such charges and expenses being incurred. .

- 2.4.2 Paragraphs 11.2.3 to 11.2.5 of the **CUSC** relating to **Consents** shall apply to the **Construction Agreement** as if set out here in full.
- 2.5 The **User** shall have the right to terminate this **Construction Agreement** at any time upon giving not less than 7 (seven) days notice in writing to **The Company**. Upon such termination the provisions of Clause 11 shall apply.
- 2.6 If the **User** fails to obtain all **Consents** for the **User's Works** having complied with the obligations in Clause 2.2 of this **Construction Agreement** the obligation on the **User** to complete the **User's Works** shall cease and the **User** may by written notice to **The Company** terminate this **Construction Agreement**. Upon such termination the provisions of Clause 11 shall apply. under
- 2.7 Both parties shall be entitled to contract or sub-contract for the carrying out of their respective parts of the **Works** (which in the case of **The Company** shall include work carried out by a **Relevant Transmission Licensee** or its contractors or sub-contractors). The **User** or any contractor on its behalf shall be responsible for commencing and for carrying out the **User's Works** to such stage of completion as shall render them capable of being **Commissioned** in accordance with the **Construction Programme** and **The Company** or any contractor on its behalf shall be responsible for commencing and carrying out the **Construction Works** to such stage of completion as shall render them capable of being **Commissioned** in accordance with the **Construction Programme**.
- 2.8 The parties shall continuously liaise throughout the **Construction Programme** and **Commissioning Programme** and each shall provide to the other all information relating to its own **Works** reasonably necessary to assist the other in performance of that other's part of the **Works**, and shall use all reasonable endeavours to coordinate and integrate their respective part of the **Works**. There shall be on-site meetings between representatives of the parties at intervals to be agreed between the parties. Each party shall deliver

to the other party a written report of progress during each calendar quarter within 7 days of the end of that quarter.

- 2.9 During the period of and at the times and otherwise as provided in the **Construction Programme** and the **Commissioning Programme** **The Company** shall allow the **User**, its employees, agents, suppliers, contractors and sub-contractors necessary access to the **Construction Site** and the **User** shall allow **The Company** or, in the case of **Connection Sites** in Scotland, the **Relevant Transmission Licensee** and in either case their employees, agents, suppliers, contractors and sub-contractors necessary access to its site to enable each to carry out the **Transmission Connection Asset Works** and **One Off Works** or **User's Works** but not so as to disrupt or delay the construction and completion of the other's **Works** on the said sites or the operation of the other's **Plant** and **Apparatus** located thereon, such access to be in accordance with any reasonable regulations relating thereto made by the site owner or occupier.
- 2.10 Not later than six months prior to the **Commissioning Programme Commencement Date** **The Company** shall provide the **User** with a draft **Commissioning Programme** for the **Commissioning** of the **Transmission Connection Assets**, and the **User's Equipment**. The **User** shall, as quickly as practicable and in any event within three months of receipt thereof, determine whether or not to approve the proposed **Commissioning Programme** (which approval shall not be unreasonably withheld or delayed) and shall within such three month period either notify **The Company** of its approval or, in the event that the **User** reasonably withholds its approval, notify **The Company** of any changes or variations to the proposed commissioning programme recommended by the **User**. If **The Company** does not accept such changes or variations submitted by the **User** any dispute shall be referred to the **Independent Engineer** for determination. The **Commissioning Programme** agreed between the parties or determined by the **Independent Engineer** as the case may be shall be implemented by the parties and their sub-contractors in accordance with its terms.
- 2.11 If at any time prior to the **Completion Date** it is necessary for **The Company** or **The Company** in its reasonable discretion wishes to make any addition to or omission from or amendment to the **Transmission Connection Asset Works** and/or **Transmission Reinforcement Works** and/or the **One Off Works** and/or the **Third Party Works** **The Company** shall notify the **User** in writing of such addition, omission or amendment and Appendices [B1 (One Off Works), G (**Transmission Connection Asset Works**) H (**Transmission Reinforcement Works**) and N (**Third Party Works**)] to this **Construction Agreement** and consequently Appendix R hereto and Appendices [A (**Transmission Connection Assets**) and B (**Connection Charges** and **One Off Charges**)] to the associated **Bilateral Connection Agreement** shall be automatically amended to reflect the change.

- 2.12 [The **User** shall apply to the Secretary of State for the Department of Energy and Climate Change as part of its application under Section 36 of the Act for its generating station, for deemed planning permission in relation to the substation forming part of the **Transmission Connection Asset Works**. The **User** shall use its best endeavours to procure that the said deemed planning permission is so obtained. **The Company's** obligations under Clause 2.2 of this **Construction Agreement** shall not require it to obtain planning consent for the said substation unless and until the Secretary of State for the Department of Energy and Climate Change shall for whatever reason refuse to deem the grant of planning permission in respect of the same. The **User** shall liaise with **The Company** as to its construction and operational requirements and shall ensure that the said application meets **The Company's** requirements. **The Company** shall provide the **User** with all information reasonably required by it in relation to the application and the **User** shall ensure that all requirements of **The Company** are incorporated in the application for deemed planning consent.]
- 2.13 [The **Transmission Reinforcement Works** are conditional on British Energy Generation Limited and/or Magnox Electric plc (as the case may be) granting approval to the carrying out of the **Construction Works** in terms of the Nuclear Site Licence Provisions Agreement being an agreement dated 30 March 1990 between The Company and Nuclear Electric plc (now called Magnox Electric plc) and an agreement dated 31 March 1996 between The Company and British Energy Generation Limited (and described as such). In the event of British Energy Generation Limited and/or Magnox Electric plc (as the case may be) not granting approval **The Company** shall be entitled to change the **Construction Works**, the **Construction Programme** and all dates specified in and Appendix R to this **Construction Agreement**.]
- 2.14 [It is hereby agreed and declared for the purposes of the Construction (Design and Management) Regulations 2007 that the **User** is the only client in respect of the **User's Works** and **The Company** is the only client in respect of the **Construction Works** and each of the **User** and **The Company** shall accordingly discharge all the duties of clients under the said **Regulations**.]
- 2.15 [The **Company** and the **User** hereby agree and acknowledge that this **Construction Agreement** is not to be treated as a construction contract within the meaning of section 104 of the Housing Grants, Construction and Re-generation Act 1996 and sections 104 to 113 of the said Act shall have no application either to the **Construction Works** or the **User's Works** and the parties' rights and obligations with regard to matters of dispute resolution and payment procedures are as expressly set out herein.
- 2.16 **Third Party Works**

- 2.16.1 The **User** shall be responsible for carrying out or procuring that the **Third Party Works** are carried out and shall carry them out or procure that they are carried out in accordance with the timescales specified in the **Construction Programme**. The **User** shall confirm to **The Company** or, where requested to do so by **The Company**, provide confirmation from the third party that the **Third Party Works** have been completed.
- 2.16.2 Given the nature of these works it may not be possible to fully identify the works required or the third parties they relate to at the date hereof. Where this is the case **The Company** shall, subject to 2.16.3 below, advise the **User** as soon as practicable and in any event by [ ] of the **Third Party Works** and shall be entitled to revise Appendix N and as a consequence the **Construction Programme** and as a consequence Appendix R as necessary to reflect this.
- 2.16.3 Where **Third Party Works** are likely to be **Modifications** required to be made by another user(s) (“the **First User(s)**”) as a consequence of **Modifications** to the **GB Transmission System** to be undertaken by **The Company** under this **Construction Agreement** **The Company** shall as soon as practicable after the date hereof issue the notification to such **First User’s** in accordance with **CUSC** Paragraph 6.9.3.1. The **User** should note its obligations under **CUSC** Paragraph 6.10.3 in respect of the costs of any **Modifications** required by the **First User(s)**.
- 2.16.4 In the event that the **Third Party Works** have not been completed by the date specified in the **Construction Programme** or, in **The Company’s** reasonable opinion are unlikely to be completed by such date, **The Company** shall be entitled to revise the **Construction Programme** as necessary to reflect such delay and also, where **The Company** considers it necessary to do so, shall be entitled to revise the **Construction Works** (and as a consequence Appendices A and B to the **Bilateral Connection Agreement**). For the avoidance of doubt such revisions shall be at **The Company’s** absolute discretion and the consent of the **User** is not required. Further, in the event that the **Third Party Works** have not been completed by [ ] **The Company** shall have the right to terminate this **Construction Agreement** upon giving notice in writing to the **User** and in this event the provisions of Clause 11 of this **Construction Agreement** shall apply.
- 2.17 If at anytime prior to the **Completion Date** the **User** makes a **Modification Application** to reduce it’s **Local Capacity Nomination** and/or **Transmission Entry Capacity** then on acceptance by the **User** of the resulting **Modification Offer** the **User** shall forthwith be liable to pay to **The Company**

the **Capacity Reduction Charge** such payment to be made within 14 days of the date of **The Company's** invoice in respect thereof.

### 3. DELAYS

- 3.1 If either party shall have reason to believe that it is being delayed or will be delayed in carrying out that party's **Works** for any reason (whether it is one entitling it to the fixing of a new date under Clause 3.2 of this **Construction Agreement** or not) it shall forthwith notify the other party in writing of the circumstances giving rise to the delay and of the extent of the actual and/or anticipated delay.
- 3.2 If prior to the **Completion Date** a party (in this Clause 3.2 "the **Affected Party**") shall be delayed in carrying out any of the **Affected Party's Works** (including their commissioning) by reason of any act, default or omission on the part of the other Party (in this Clause the "**Defaulting Party**") or the **Defaulting Party's** employees, agents, contractors or sub-contractors or by reason of an event of **Force Majeure**, the **Affected Party** shall be entitled to have such later date or dates fixed as the **Commissioning Programme Commencement Date** and/or (as the case may be) the **Completion Date** as may be fair and reasonable in the circumstances provided that it shall have notified the **Defaulting Party** in writing of such act, default or omission or event of **Force Majeure** within 28 days of it becoming aware of the occurrence giving rise to the delay together with an estimate of the proposed delay which it will cause the **Affected Party**. In the event of a dispute between the parties over what is or are any fair and reasonable new date or dates to be fixed in the circumstances this shall be promptly referred to and determined by the **Independent Engineer**. Once the new date or dates are fixed the **Construction Programme** and/or **Commissioning Programme** shall be deemed automatically amended as appropriate and **The Company** shall be entitled to amend Appendix R as necessary to reflect this.

### 4. COMMISSIONING PROGRAMME AND LIQUIDATED DAMAGES

- 4.1 Each party shall give written notice to the other declaring its readiness to commence the **Commissioning Programme** when this is the case.
- 4.2 The **Commissioning Programme** shall commence forthwith once both parties have given written notice to the other under Clause 4.1.
- 4.3 The **Works** shall be deemed to have been **Commissioned** on the date that the **Independent Engineer** certifies in writing to that effect.
- 4.4 In the event that the actual date of commencement of the **Commissioning Programme** is later than the **Commissioning Programme Commencement Date** **The Company** (if and to the extent that it is responsible for delayed

commissioning beyond the **Commissioning Programme Commencement Date**, such responsibility and/or its extent to be determined by the **Independent Engineer** failing agreement between the parties) shall be liable to pay to the **User Liquidated Damages** for each day that the actual date of commencement of the **Commissioning Programme** is later than the **Commissioning Programme Commencement Date**. It is declared and agreed that such **Liquidated Damages** shall cease to be payable in respect of any period after the date of actual commencement of the **Commissioning Programme**.

- 4.5 In the event that the actual date on which the **Construction Works** are **Commissioned** is later than the **Completion Date** **The Company** (if and to the extent that it is responsible for delayed completion beyond the **Completion Date**, such responsibility and/or its extent to be determined by the **Independent Engineer** failing agreement between the parties) shall be liable to pay to the **User Liquidated Damages** for each day that the actual date on which the **Construction Works** are **Commissioned** is later than the **Completion Date**. It is hereby agreed and declared that such **Liquidated Damages** shall cease to be payable in respect of any period after completion of the **Construction Works**.
- 4.6 **Liquidated Damages** payable under Clauses 4.4 and 4.5 of this **Construction Agreement** shall accumulate on a daily basis but shall be payable calendar monthly. On or before the 15th day of each month the party entitled to receive the payment of **Liquidated Damages** shall send to the other party a statement of the **Liquidated Damages** which have accrued due in the previous calendar month. The party receiving such statement shall in the absence of manifest error pay the **Liquidated Damages** shown on the statement within 28 days of the date upon which the statement is received.
- 4.7 Without prejudice to and in addition to the obligation of the **User** pursuant to Clause 2.4 of this **Construction Agreement**, the payment or allowance of **Liquidated Damages** pursuant to this Clause 4 shall be in full satisfaction of **The Company's** liability for failure to perform its obligations by the **Commissioning Programme Commencement Date** and/or the **Completion Date** as appropriate.
- 4.8 In the event that the **User** shall have failed, in circumstances not entitling it to the fixing of a new date as the **Commissioning Programme Commencement Date** pursuant to Clause 3.2, to complete the **User's Works** by the **Backstop Date** to a stage where the **User** is ready to commence the **Commissioning Programme**, **The Company** shall have the right to terminate this **Construction Agreement** upon giving notice in writing to the **User**. Upon such termination the provisions of Clause 11 shall apply. .

## 5. APPROVAL TO CONNECT/ENERGISE/BECOME OPERATIONAL

- 5.1 Not later than 4 months prior to the expected **Commissioning Programme Commencement Date** or by such other time as may be agreed between the parties the parties shall prepare and submit the **Operation Diagrams** required to be prepared and submitted by each of them respectively under CC 7.4.7 and 7.4.10 and likewise the **Site Common Drawings** required under CC 7.5.2 and 7.5.4 and, if necessary, **Gas Zone Diagrams** referred to in CC 7.4.9 and 7.4.12.
- 5.2 Not later than 3 months prior to the expected **Commissioning Programme Commencement Date** or by such other time as may be agreed between the parties the parties shall prepare and submit the **Operation Diagrams** required to be prepared and submitted by each of them respectively under CC 7.4.8 and 7.4.11 and likewise the **Site Common Drawings** required under CC 7.5.3 and 7.5.5.
- 5.3 Not later than 3 months prior to the expected **Commissioning Programme Commencement Date** or by such other time as may be agreed between the parties:-
- 5.3.1 each party shall submit to the other data within its possession needed to enable the completion of Appendices F3 and F4 to the **Bilateral Connection Agreement**; and
- 5.3.2 the **User** shall submit to **The Company** evidence satisfactory to **The Company** that the **User's Equipment** complies or will on completion of the **User's Works** comply with Clause 8 of this **Construction Agreement** and Paragraphs [1.3.3(b), 2.9 and 6.7] of the **CUSC**.
- 5.4 Not later than 8 weeks prior to the expected **Commissioning Programme Commencement Date** or by such other time as may be agreed between the parties each party shall submit to the other:
- 5.4.1 for the **Connection Site** information to enable preparation of **Site Responsibility Schedules** complying with the provisions of Appendix 1 to the **Connection Conditions** together with a list of managers who have been duly authorised by the **User** to sign such **Site Responsibility Schedules** on the **User's** behalf;
- 5.4.2 written confirmation as required under CC.5.2.1(g) that the list of **Safety Co-ordinators** are authorised and competent [and a list of persons appointed pursuant to **Grid Code** CC5.2(m)];
- 5.4.3 a list of the telephone numbers for the facsimile machines referred to in CC6.5.9.

- 5.5 If directly connected to the **GB Transmission System** not later than 3 months prior to the expected **Commissioning Programme Commencement Date** each party shall submit to the other a statement of readiness to complete the **Commissioning Programme** in respect of the **Works** and the statement submitted by the **User** shall in addition contain relevant **Connected Planning Data** and a report certifying to **The Company** that, to the best of the information, knowledge and belief of the **User**, all relevant **Connection Conditions** applicable to the **User** have been considered and complied with. If **The Company** considers that it is necessary, it will require this latter report to be prepared by the **Independent Engineer**. The report shall incorporate if requested by **The Company** type test reports and test certificates produced by the manufacturer showing that the **User's Equipment** meets the criteria specified in CC6.
- 5.6 If embedded not later than 3 months prior to the **Charging Date** or by such other time as may be agreed between the **Parties** the **User** shall submit to **The Company** a statement of readiness to use the **GB Transmission System** together with **Connected Planning Data** and a report certifying to **The Company** that, to the best of the information, knowledge and belief of the **User**:-
- (i) all relevant **Connection Conditions** applicable to the **User** have been considered;
  - (ii) CC 6 insofar as it is applicable to the **User** has been complied with; and
  - (iii) the site-specific conditions set out in Appendices [F1, F3, F4] and [F5] to the **Bilateral Embedded Generation Agreement** have been complied with.

If **The Company** considers that it is necessary, it will require this report to be prepared by the **Independent Engineer**. The report shall incorporate if requested by **The Company** type test reports and test certificates produced by the manufacturer showing that the **User's Equipment** meets the criteria.

## 6. INDEPENDENT ENGINEER

The parties agree and shall procure that the **Independent Engineer** shall act as an expert and not as an arbitrator and shall decide those matters referred or reserved to him under this **Construction Agreement** by reference to **Good Industry Practice** using his skill, experience and knowledge and with regard to such other matters as the **Independent Engineer** in his sole discretion considers appropriate. All references to the **Independent Engineer** shall be made in writing by either party with notice to the other being given contemporaneously as soon as reasonably practicable and in

any event within 14 days of the occurrence of the dispute to be referred to the **Independent Engineer**. The parties shall promptly supply the **Independent Engineer** with such documents and information as he may request when considering such question. The **Independent Engineer** shall use his best endeavours to give his decision upon the question before him as soon as possible following its referral to him. The parties shall share equally the fees and expenses of the **Independent Engineer**. The parties expressly acknowledge that submission of disputes for resolution by the **Independent Engineer** does not preclude subsequent submission of disputes for resolution by arbitration as provided for in the **Dispute Resolution Procedure**. Pending any such submission the parties shall treat the **Independent Engineer's** decision as final and binding.

## 7. BECOMING OPERATIONAL

- 7.1 If directly connected to the **GB Transmission System** **The Company** shall connect and **Energise** the **User's Equipment** at the **Connection Site** during the course of and in accordance with the **Commissioning Programme** and thereafter upon compliance by the **User** with the provisions of Clause 5 and provided (1) the **Construction Works** excluding the **Seven Year Statement Works** shall be **Commissioned** and (2) the **Seven Year Statement Works** and **Third Party Works** shall be completed **The Company** shall forthwith notify the **User** in writing that the **Connection Site** shall become **Operational** for the purposes of its **Local Capacity Nomination** [and **Transmission Entry Capacity**].
- 7.2 If **Embedded** upon compliance by the **User** with the provisions of Clauses 5.1, 5.2 and 5.3 and subject, if **The Company** so requires, to the **Transmission Reinforcement Works** [and/or works for the **Modification**] being carried out and/or the [New] **Connection Site** being **Operational** (any or all as appropriate) **The Company** shall forthwith notify the **User** ("**Operational Notification**") in writing that it has the right to use the **GB Transmission System** for the purposes of its **Local Capacity Nomination** [and **Transmission Entry Capacity**]. It is an express condition of this **Construction Agreement** that in no circumstances, will the **User** use or operate the **User's Equipment** without receiving the **Operational Notification** from **The Company**.
- 7.3 If, on completion of the **User's Works** in accordance with the terms of this **Construction Agreement** the **Registered Capacity** of the **User's Equipment** is less than [ ]MW, **The Company** shall automatically have the right to amend Clause 7 and Appendix C to the **Bilateral Connection Agreement** to reflect the actual **Registered Capacity** of the **User's Equipment**.

#### 7.4 **Local Capacity Nomination and/or Transmission Entry Capacity Reduction**

- 7.4.1 If, at any time prior to the **Completion Date** **The Company** reasonably believes from data provided by the **User** to **The Company**, the reports provided by the **User** pursuant to Clause 2.8 and Clause 5 of this **Construction Agreement**, the commissioning process under the **Construction Agreement** or otherwise that the **User's Equipment** will be such that it will not be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination and/or Transmission Entry Capacity** **The Company** shall advise the **User** accordingly in writing setting out its reasons for this belief, the source of the information giving rise to the concern and seeking clarification from the **User**.
- 7.4.2 The **User** shall respond to **The Company** within 15 **Business Days** of the date of the **Preliminary Request** providing such information or data as is necessary to satisfy **The Company's** concerns set out in the **Preliminary Request** and making any amendments necessary to the report provided by the **User** pursuant to Clause 2.8 and / or data provided by the **User** to **The Company** to reflect this.
- 7.4.3 In the event that **The Company** is satisfied from the information provided in accordance with Clause 7.4.2 by the **User** that the **User's Equipment** will be such that it will be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination and/or Transmission Entry Capacity** **The Company** shall notify the **User** accordingly.
- 7.4.4 In the event that the **User** does not respond to the **Preliminary Request** or, notwithstanding the **User's** response, **The Company** remains of the view that the **User's Equipment** will be such that it will not reasonably be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination and/or Transmission Entry Capacity** **The Company** shall inform the **User** in writing that it intends to amend Clause 7 and Appendix C to the [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**] to reflect the **Local Capacity Nomination and/or Transmission Entry Capacity** that it reasonably believes to be the level of power that the **User's Equipment** will be capable of exporting .
- 7.4.5 The **User** shall respond to the **Notice of Intent** within 15 **Business Days** of the date of the **Notice of Intent** explaining why it still reasonably believes that its **User's Equipment** will be capable of exporting power onto the **GB Transmission System** at the level of

the **Local Capacity Nomination** and/or **Transmission Entry Capacity** or at more than the MW figure proposed by **The Company** in the **Notice of Intent** or providing a reasonable explanation as to why this is not the case.

- 7.4.6 In the event that **The Company** is satisfied from the information provided in accordance with Clause 7.4.5 by the **User** that the **User's Equipment** will be such that it will be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination** and/or **Transmission Entry Capacity** **The Company** shall notify the **User** accordingly.
- 7.4.7 Where notwithstanding the **User's** response to the **Notice of Intent** **The Company** remains of the view that the **User's Equipment** will be such that it will not reasonably be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination** and/or **Transmission Entry Capacity** or at more than the MW figure proposed by **The Company** in the **Notice of Intent** or the **User** does not provide a response that is satisfactory to **The Company** within the timescale specified in 7.4.5 above **The Company** will issue the **Notice of Reduction** to the **User** and will send a copy of the same to the **Authority**.
- 7.4.8 Unless during such period the matter has been referred by the **User** to the **Authority** for determination by the **Authority** under the provisions of Standard Condition C9 Paragraph 4 of the **Transmission Licence**, the **Notice of Reduction** shall take effect on the day 15 **Business Days** after the date of the **Notice of Reduction** and Appendix C of the [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**] shall be amended on that date in the manner set out in the **Notice of Reduction**. Where the matter has been referred the amendments to Appendix C of the [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**] and the date they take effect shall be as set out in the **Authority's** determination.
- 7.4.9 After a **Notice of Reduction** has taken effect **The Company** shall be entitled to make such amendments to this **Construction Agreement** as it requires as a result of the reduction in the **Local Capacity Nomination** and/or **Transmission Entry Capacity** effected by the **Notice of Reduction** and as a consequence to the [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**]. **The Company** shall advise the **User** as soon as practicable and in any event within 3 months of the date of the **Notice of Reduction** (or if the matter has been referred by the **User** to the **Authority** for determination, the date of determination) of such

amendments by way of offer of an agreement to vary the **Construction Agreement** and [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**]. This agreement to vary will also provide for payment by the **User** of the **Reduction Fee** where applicable. The parties acknowledge that any dispute regarding this variation shall be referable to and determined by the **Authority** under the provisions of Standard Condition C9 Paragraph 4 of the **Transmission Licence**.

7.4.10 On the date that the **Notice of Reduction** takes effect the **User** shall be liable to pay to **The Company** the **Capacity Reduction Charge** such payment to be made within 14 days of the date of **The Company's** invoice therefor.

## 8. COMPLIANCE WITH SITE SPECIFIC TECHNICAL CONDITIONS

The **User** shall ensure that on the **Completion Date** the **User's Equipment** complies with the site specific technical conditions set out in Appendix F 1-5 to the **Bilateral Connection Agreement**.

## 9. SECURITY REQUIREMENTS and FINAL SUMS RECONCILIATION

### 9.1 Security

The **User** shall provide security to **The Company** in accordance with **CUSC** Schedule 4 in respect of the **User's** obligations to pay the **Final Sums** and **BC Cancellation Charge** to **The Company** on termination of this **Construction Agreement**.

### 9.2 Final Sums Reconciliation

9.2.1 Within 60 days of the date of termination of this **Construction Agreement** **The Company** shall:

- (a) furnish **the User** with a statement showing a revised estimate of **Final Sums** and will provide as soon as practicable evidence of such costs having been incurred; and
- (b) by written notice to **the User** inform **the User** of all capital items which cost **The Company** in excess of £10,000 and in relation to which an amount on account of **Final Sums** shall have been paid and whether **The Company** (1) wishes to retain the said capital items or (2) dispose of them.

- 9.2.2 In respect of all capital items which **The Company** wishes to retain (other than those which have been, or are proposed to be installed as a replacement for **Transmission Plant** and **Transmission Apparatus**) **The Company** shall forthwith reimburse to the **User** the amount paid by the **User** on account of **Final Sums** in respect of the said capital items (including without limitation the amount paid on account of the design, purchase, installation and testing of the said capital item and also associated construction works and interest charges) together with interest calculated thereon on a daily basis from the date of termination of this **Construction Agreement** to the date of payment at **Base Rate** for the time being and from time to time provided that in the event that **The Company** wishes to retain any capital item which has been installed but wishes to remove it to storage or to another site then it shall only reimburse to the **User** the cost of the capital item and not the costs of such installation and shall deduct from any reimbursement due to the **User** the costs of removal and/or storage.
- 9.2.3 In respect of all capital items which **The Company** wishes to dispose (other than those which have been, or are proposed to be installed as a replacement for **Transmission Plant** and **Transmission Apparatus**) it shall forthwith (and subject to **The Company** obtaining the consent of the **Authority** under Standard Condition B3 of the **Transmission Licence** if required and/or subject to any **Relevant Transmission Licensee** obtaining the consent of the **Authority** under Standard Condition B3 of its transmission licence) sell or procure the sale of the said capital item on an arms-length basis as soon as reasonably practicable. Forthwith upon receipt of the sale proceeds **The Company** shall pay to the **User** the proceeds received from any such sale together with interest thereon calculated on a daily basis from the date of termination to the date of payment at **Base Rate** for the time being and from time to time less any reasonable costs associated with the sale including the costs and expenses reasonably incurred and/or paid and/or which **The Company** is legally bound to pay on removing the capital item, any storage charges and any costs reasonably incurred by **The Company** in respect of reinstatement associated with removal of the capital item. **The Company** shall provide the **User** with reasonably sufficient evidence of all such costs and expenses having been incurred. If the **Authority** does not agree to the disposal of the capital item the capital item shall be retained by **The Company** and **The Company** shall reimburse the **User** the notional current market value in situ of the said capital item as between a willing buyer and a willing seller as agreed between the parties and failing agreement as determined by reference to arbitration in accordance with the **Dispute Resolution Procedure** together with interest thereon calculated on a

daily basis from the date of termination of this **Construction Agreement** to the date of payment at **Base Rate** for the time being and from time to time.

- 9.2.4 As soon as reasonably practicable after termination of this **Construction Agreement** **The Company** shall provide the **User** with a statement of and invoice for **Final Sums** together with evidence of such costs having been incurred and/or paid and/or having been committed to be incurred. If the **Final Sums** are greater than the payments made by the **User** in respect of **The Company's** estimate(s) of **Final Sums** the **User** shall within 28 days of the said statement and invoice prepared by **The Company** pay to **The Company** the additional payments due by the **User** together with interest calculated thereon on a daily basis at **Base Rate** for the time being and from time to time from the date of previous payment(s) sums equal to **The Company's** estimate of **Final Sums** to the date of the statement of and invoice for **Final Sums**.

If the **Final Sums** is less than the payments made by the **User** in respect of **The Company's** estimate of **Final Sums** paid by the **User** following termination of this **Construction Agreement** **The Company** shall forthwith pay to the **User** the excess paid together with interest on a daily basis at **Base Rate** for the time being and from time to time from the date of payment of the fair and reasonable estimate of **Final Sums** to the date of reimbursement by **The Company** of the said excess paid.

## 10. EVENT OF DEFAULT

Alternate provisions apply depending whether or not the **User** does (10A) or does not (10B) meet **The Company's** required credit rating on signing this **Construction Agreement**

### 10A. Event of Default

Any of the following events shall constitute an **Event of Default**:-

- 10A.1 If the **User** fails to provide or procure that there is provided to **The Company** within the requisite time any relevant security satisfactory to **The Company**, pursuant to this **Construction Agreement** and **CUSC** Schedule 4 Part Three.
- 10A.2 If having having provided security satisfactory to **The Company** pursuant to pursuant to this **Construction Agreement** and **CUSC** Schedule 4 Part Three.
- (a) The **User** thereafter fails to provide or procure that there is provided to **The Company** or at any time fails to maintain or procure that

there is maintained in full force and effect the relevant security arrangement required by **CUSC** Schedule 4 Part Three or to revise or renew such security with the required replacement security or to maintain or procure that there is maintained in full force and effect any such renewed, revised or substituted security as so required, or if the User shall otherwise be in breach of any of its obligations in respect of security under to this **Construction Agreement** and **CUSC** Schedule 4 Part Three;

- (b) The **User** or any shareholder (whether direct or indirect) of the **User** or any other party who may at any time be providing security to **The Company** pursuant to the requirements of this **Construction Agreement** and **CUSC** Schedule 4 Part Three takes any action whether by way of proceedings or otherwise designed or calculated to prevent, restrict or interfere with the payment to **The Company** of any amount so secured whether or not there shall be a dispute between the parties;
- (c) Any party who may at any time be providing security to **The Company** pursuant to the provisions of this **Construction Agreement** and **CUSC** Schedule 4 Part Three fails to pay to **The Company** any sum demanded pursuant thereto.

#### 10A.3 If

- (i) There is a material adverse change in the financial condition of the **User** such as to give **The Company** reasonable grounds for concluding that there is a substantial probability that the **User** will default in the payment of any sums due or to become due to **The Company** within the next following period of twelve (12) months in terms of or on termination of this **Construction Agreement**; or
- (ii) an event of default has occurred under any banking arrangements (as such may be more particularly described in the **Bilateral Connection Agreement**) (an event of default being any event described as such in the banking arrangements)] put in place by the **User** in connection with a project for which security under this Clause 10A is required by **The Company** and as a result the banks who are party to such banking arrangement have taken steps to declare the principle of the advances under such arrangement immediately due and payable; or
- (iii) any other indebtedness of the **User** for the repayment of borrowed money (in a principal outstanding amount of not less than £1,000,000 pounds sterling or such greater amount specified in the **Bilateral Connection Agreement**) has become due and payable

prior to the stated date of maturity thereof by reason of any default or breach on the part of the **User** and the amount in question has not been paid by the **User** or refinanced within a period of 28 days following the date upon which it was so declared due and payable

and in (i) or (ii) or (iii) the **User** fails, within a period of 7 (seven) days following the date on which **The Company** gives the **User** notice in writing of one or other of the above events occurring to provide **The Company** with such security as **The Company** shall require to cover the **User's** payment obligations to **The Company** arising in the event of or which have arisen prior to termination of this **Construction Agreement** and which arise under this **Construction Agreement**. The security to be provided shall be in a form satisfactory to **The Company** in accordance with this **Construction Agreement** and **CUSC** Schedule 4 Part Three.

Provided that (in relation to paragraphs (i) or (ii) or (iii) above) if at anytime after the putting in place of security under Clause 10A.3 the **User** shall produce to **The Company** evidence to **The Company's** reasonable satisfaction that there is not a substantial probability of the **User** not being able to make payment to **The Company** of such sums within the next following period of twelve (12) months, **The Company** shall not require the **User** to provide the aforesaid security and shall release any such security then in place. This waiver is without prejudice to **The Company's** right to require security at any time thereafter in the event of any of the circumstances set out in paragraph (i) and/or (ii), and/or (iii) subsequently occurring.

10A.4 Where any of the **Events of Default** in Paragraph 5.3.1 of the **CUSC** have occurred and are occurring it shall be an **Event of Default** for the purposes of Clause 11 of this **Construction Agreement**.

10B **Event of Default**

10B.1 If

- (i) an event of default has occurred under any banking arrangements (as such may be more particularly described in the **Bilateral Connection Agreement**) (an event of default being any event described as such in the banking arrangements) put in place by the **User** in connection with a project for which security under this Clause 10B is required by **The Company** and as a result the banks who are party to such banking arrangement have taken steps to declare the principle of the advances under such arrangement immediately due and payable; or

(ii) there is a material adverse change in the financial condition of the **User** such as to give **The Company** reasonable grounds for concluding that there is a substantial probability that the **User** will default in the payment of any unsecured sum due or to become due to **The Company** within the next following period of 12 (twelve) months in terms of or on termination of this **Construction Agreement**;

(iii) any other indebtedness of the **User** for the repayment of borrowed money (in a principal amount of not less than £1,000,000 pounds sterling or such greater amount specified in the **Bilateral Connection Agreement**) has become due and payable prior to the stated date of maturity thereof by reason of any default or breach on the part of the **User** and the amount in question has not been paid by the **User** or refinanced within a period of 28 days following the date upon which it was so declared due and payable

and in either (i) or (ii) or (iii) the **User** fails:-

- (1) within a period of 14 (fourteen) days following the date on which **The Company** gives notice of such circumstances to provide to **The Company** a cash deposit in a **Bank Account**, a **Performance Bond** or **Letter of Credit** in favour of **The Company** and **Valid** at least up to the last day of the **Financial Year** in which the event occurs for such amount representing **The Company's** reasonable estimate of all unsecured sums to become due to **The Company** in the period up to the end of the **Financial Year** in which the event occurs such sum to be specified in the said notice; or
- (2) to subsequently provide such cash deposit or renew such **Performance Bond** or **Letter of Credit** (or such renewed **Performance Bond** or **Letter of Credit** provided under this paragraph) not less than 45 days prior to its stated expiry date for such amount representing **The Company's** reasonable estimate of the unsecured sums to become due to **The Company** in the next following **Financial Year** valid at least up to the last day of the next following **Financial Year** and to continue the provision of cash deposit a **Performance Bond** or **Letter of Credit** in a similar manner, to such estimate of unsecured sums.

Provided that regarding (i) or (ii) or (iii) if at any time after the putting in place of security under this Clause 10B.1 the **User** shall provide to **The Company** evidence to **The Company's** reasonable satisfaction that there is not a substantial probability of the **User** being unable to make payment to **The Company** of any unsecured sums within the next following period of twelve (12) months, **The Company** shall not require the **User** to provide

the aforesaid security and shall release any such security then in place. This waiver is without prejudice to **The Company's** right to return security at any time thereafter in the event of any of the circumstances set out in paragraph (i) and/or (ii) and/or (iii) in this Clause 10B.1 subsequently occurring.

- 10B.2 If the **User** fails to provide or procure that there is provided to **The Company** or at any time fails to maintain or procure that there is maintained in full force and effect the relevant security arrangement required under this **Construction Agreement** and **CUSC** Schedule 4 Part Three or to renew or revise such security or to substitute any security with the required replacement security or to maintain or procure that there is maintained in full force and effect any such renewed, revised or substituted security as so required or if the **User** is otherwise in breach of any of its obligations under this **Construction Agreement** and **CUSC** Schedule 4 Part Three.
- 10B.3 If the **User** or any shareholder (whether direct or indirect) of the **User** takes any action whether by way of proceedings or otherwise designed or calculated to prevent, restrict or interfere with the payment to **The Company** of any amount so secured or seeks or permits or assists others to do so, whether or not there shall be a dispute between the parties.
- 10B.4 If any party who may at any time be providing or holding security in favour of **The Company** in respect of this **Construction Agreement** pursuant to this **Construction Agreement** and **CUSC** Schedule 4 Part Three fails to pay **The Company** any sum demanded in any **Notice of Drawing** pursuant thereto.
- 10B.5 Where any of the **Events of Default** in Paragraph 5.3.1 of the **CUSC** have occurred and are occurring it shall be an **Event of Default** for the purposes of Clause 11 of this **Construction Agreement**.

## **11. TERMINATION ON EVENT OF DEFAULT**

- 11.1 Once an **Event of Default** pursuant to Clause 10 has occurred and is continuing **The Company** may give notice of termination to the **User** whereupon this **Construction Agreement** shall forthwith terminate and the provisions of this Clause 11 shall apply.
- 11.2 On termination of this **Construction Agreement** **The Company** shall disconnect all the **User's Equipment** at the **Connection Site** and:

- (a) the **User** shall remove any of the **User's Equipment** on, in relation to **Connection Sites** in England and Wales, **The Company's** or, in relation to **Connection Sites** in Scotland, **Relevant Transmission Licensee's** land within 6 months of the date of termination or such longer period as may be agreed between **The Company** or the **Relevant Transmission Licensee** (as appropriate) and the **User**; and
- (b) in the case of **Connection Sites** in England and Wales, **The Company** shall remove and, in the case of **Connection Sites** in Scotland, **The Company** shall procure that the **Relevant Transmission Licensee** removes, any **Transmission Connection Assets** on the **User's** land within 6 months of the date of termination or such longer period as may be agreed between **The Company** or the **Relevant Transmission Licensee** (as appropriate) and the **User**.

11.3 The **User** shall where this **Construction Agreement** terminates prior to the **[Charging] [Completion]Date** be liable forthwith on the date this **Construction Agreement** so terminates to pay to **The Company**:-

- (1) the **BC Cancellation Charge**; and
- (2) **Final Sums** and on such termination shall be liable to pay a sum equal to **The Company's** fair and reasonable estimate of **Final Sums**,

such payments in each case to be made within 14 days of the date of **The Company's** invoice(s) in respect thereof and subject to adjustment in respect of **The Company's** estimate of **Final Sums** in accordance with Clause 9.2.

## 12. TERM

12.1 Subject to the provisions for earlier termination set out in the **CUSC** this **Construction Agreement** shall continue until terminated in accordance with Clause 2.5, 2.6, 4.8 or 11 hereof.

12.2 In addition this **Construction Agreement** shall terminate upon termination of the associated **Bilateral Connection Agreement** and in the event that this is prior to the **Charging Date** the **User** shall in addition to the amounts for which it is liable under Clause 2.4 hereof be liable to pay to **The Company Final Sums** and the provisions of Clause 11 shall apply.

12.3 The associated **[Bilateral Connection Agreements or Agreement to Vary the Bilateral Connection Agreement]** will automatically terminate

upon termination of this **Construction Agreement** prior to the **Charging Date**.

12.4 Any provisions for payment shall survive termination of this Construction Agreement.

### 13. **CUSC**

The provisions of Sections 6.6 (Payment), 6.14 (Transfer and Subcontracting), 6.15 (Confidentiality), 6.18 (Intellectual Property), 6.19 (Force Majeure), 6.20 (Waiver), 6.21 (Notices), 6.22 (Third party Rights), 6.23 (Jurisdiction), 6.24 (Counterparts), 6.25 (Governing Law), 6.26 (Severance of Terms), 6.27 (Language) inclusive of the **CUSC** shall apply to this **Construction Agreement** as if set out in this **Construction Agreement**.

### 14. **DISPUTES**

Except as specifically provided for in this **Construction Agreement** any dispute arising under the terms of this **Construction Agreement** shall be referred to arbitration in accordance with the **Dispute Resolution Procedure**.

### 15. **VARIATIONS**

15.1 Subject to Clause 15.2 and 15.3 below, no variation to this **Construction Agreement** shall be effective unless made in writing and signed by or on behalf of both **The Company** and the **User**.

15.2 **The Company** and the **User** shall effect any amendment required to be made to this **Construction 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.

15.3 **The Company** has the right to vary Appendices in accordance with Clauses 2.3, 2.11 and 7.4 and Paragraph 6.9 of the **CUSC**.

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

CUSC v1.5

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

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

CUSC v1.5

**APPENDIX [J]**  
**CONSTRUCTION PROGRAMME**

CUSC v1.5

## **APPENDIX [H]**

### **TRANSMISSION REINFORCEMENT WORKS**

**Part 1 LCN Transmission Reinforcement Works**

**Part 2 TEC Transmission Reinforcement Works**

**APPENDIX [L]**

**INDEPENDENT ENGINEER**

Company:

Connection site:

Type:

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The Independent Engineer will be a Member of the Association of Consulting Engineers (ACE) and shall be agreed between the parties within 120 days of execution of this Construction Agreement or such other period as may be agreed between the parties. Failing agreement it shall be referred to the President of the Institution of Electrical Engineers who shall nominate the Independent Engineer.

**APPENDIX [K]**

**LIQUIDATED DAMAGES**

Company:

Connection site:

Type:

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The amount of Liquidated Damages payable by The Company to the User pursuant to this Construction Agreement shall be:

Liquidated Damages under Clause [4] of this Construction Agreement shall be calculated on a daily basis at a rate of £XXXXXX per week subject to the limit that the total Liquidated Damages payable by The Company to the User under this Clause shall not exceed £XXXXXX.

CUSC v1.5

**APPENDIX [G]**  
**TRANSMISSION CONNECTION ASSET WORKS**

CUSC v1.5

**APPENDIX [B]**  
**[Part 1]**  
**ONE OFF WORKS**

CUSC v1.5

1.

**APPENDIX [N]**  
**THIRD PARTY WORKS**

CUSC v1.5

**END OF SCHEDULE 2 EXHIBIT 3**

## SCHEDULE 4

### USER COMMITMENT PRINCIPLES

#### Introduction

The purpose of this Schedule 4 is to specify the principles and set out the methodology used to calculate the **Cancellation Charge** and **Capacity Reduction Charge** payable by **Users** in the categories of **Power Stations** directly connected to the **GB Transmission System** who are parties to a **Bilateral Connection Agreement** with **The Company** and **Users** in the category of **Embedded Power Stations** who are parties to a **Bilateral Embedded Generation Agreement** with **The Company** and reference to **User** in this section shall be interpreted accordingly.

It also sets out in PART THREE the requirements and arrangements for security in respect of the **BC Cancellation Charge** and **Final Sums** for the **One Off Charge**.

For the avoidance of doubt this schedule does not apply to **Users** other than those described above.

#### PART ONE

##### 1 CANCELLATION CHARGE

- 1.1 Where a **Construction Agreement** and/or a **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** between a **User** and **The Company** is terminated such **User** shall be liable to pay to **The Company** the **Cancellation Charge**.

Please note for information, that such **User** shall on termination of a **Construction Agreement** prior to the **Completion Date** (as defined in such **Construction Agreement**) be liable in addition to the **Cancellation Charge** for **Final Sums** (as defined in its **Construction Agreement**) in respect of any **One Off Works** in such **Construction Agreement**.

- 1.2 The **Cancellation Charge** to be payable in such circumstances and the level of security to be provided in respect of this shall be calculated in accordance with this Schedule 4 which also sets out the process for the types of security required.
- 1.3 The **Cancellation Charge** varies throughout the term of the **User's Construction Agreement** and **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement**. The liabilities and levels of security required from a **User** on termination of its **Construction Agreement** up to and including the **Completion Date** (the "**BC Cancellation Charge**") shall be calculated in accordance with this Schedule 4

Paragraph 2 and detailed in that **User's Construction Agreement**. The liabilities required from **Users** on termination of its **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** at any time after the **Completion Date** (the "**AC Cancellation Charge**") shall be as calculated in accordance with this Schedule 4 Paragraph 3.

1.4 Value Added Tax will be payable on any **Cancellation Charge**.

## **2 BC CANCELLATION CHARGE**

### **Completion Date and Trigger Date**

2.1 In making an **Offer** to a **User** **The Company** will consider the **Construction Works** and **Construction Programme** associated with that **Offer** and taking into account the nature and programming of the **Construction Works** and the **Consents** associated with this will identify dates in the **Construction Agreement** as the **Completion Date** for the works and the **Trigger Date**.

2.2 Where there are no **Consents** required for the **Construction Works** the **Trigger Date** will be the date four calendar years prior to the **Completion Date** or the date of the **Construction Agreement** if this is less than four calendar years prior to the **Completion Date**.

2.3 Where **Consents** are required for the **Construction Works** the **Trigger Date** will be a date no later than four calendar years prior to the **Completion Date** or the date by which the **Consents** are expected..

2.4 Using the above principles **The Company** will identify a **Trigger Date** and a profile of the **Cancellation Charge** showing the **Cancellation Charge** due by reference to termination of the **Construction Agreement** within specified periods (the "**Cancellation Periods**"). This profile will assume a start on the last day that a **User** could accept the **Offer** and will be set out in the **Construction Agreement**.

### **Changes to Construction Programme or Construction Works or Transmission Entry Capacity**

2.6 Where the **Construction Programme** or the **Construction Works** or **Transmission Entry Capacity** subsequently change from that in the original **Construction Agreement** the following principles will apply in respect of reassessing the **Trigger Date** and the **Cancellation Charge**.

2.7 Where such change is as a result of **The Company's** exercise of its rights under the **Construction Agreement** then:

- (i) Where there is a delay to the **Completion Date** and the **Trigger Date** has not passed, there will be a corresponding delay to the **Trigger Date** and the profile of the **User Commitment Amount** and the **BC Cancellation Amount** revised accordingly in line with the above principles. If the **Trigger Date** has already passed, the profile of the **BC Cancellation Amount** will be revised accordingly on the basis of the above principles by reference to the number of full 12-month periods from the new **Completion Date**.
- (ii) Where there is no delay to the **Completion Date**, but the **Construction Works** change, **The Company** will review the appropriateness of the **Trigger Date** and if appropriate, change this. The profile of the **User Commitment Amount** and **BC Cancellation Amount** will be revised on the principles set out above to reflect the change in **Trigger Date**.

2.8 Where such change is as a result of the **User's** request a revised **Cancellation Charge** profile will be issued by the **Company** to the **User** but notwithstanding any change in the **Construction Works** or **Completion Date**:

- (i) Where the revised **Construction Programme** alters the period of full years between the date of signature of the original **Construction Agreement** and the **Trigger Date** the **User Commitment Amount** will remain at the amount at the time the user requested the change until it is due to rise based on the revised **Cancellation Charge** profile the revised **Construction Programme**; or
- (ii) The **Cancellation Amount** will be frozen at the prevailing level and remain at that level for the period of the slippage.

#### **TNUoS Tariffs**

2.9 Where any **BC Cancellation Charges** are calculated by reference to TNUoS tariffs these tariffs will be calculated and fixed as the TNUoS tariff as on the last day that the offer for such **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** and any associated **Construction Agreement** could have been accepted. If such a tariff is not currently published, then the appropriate tariff will be calculated by **The Company** as part of the application process, in accordance with the **Statement of the Use of Charging Methodology**.

#### **BC Cancellation Charge**

2.10 This is a **User's** liability on termination of a **Construction Agreement** prior to the **Completion Date**.

2.11 This in turn is different depending on whether the **Construction Agreement** is terminated before (the "**User Commitment Amount**") or on or after (the "**BC Cancellation Amount**") the **Trigger Date**.

## User Commitment Amount

- 2.12 Should a **User** terminate its **Construction Agreement** on or before the **Trigger Date** it shall be liable to pay the **User Commitment Amount** calculated as follows:

$$\text{User Commitment Amount} = \text{TEC} \times \text{UCA}_t$$

Where:

- *TEC* expressed in kW.
- *UCA<sub>t</sub>* which varies according to the number of full years from the date of the Construction Agreement:
  - In the first year (i.e.  $t=1$ )  $\text{UCA}_t = \text{Min} (\text{£}1/\text{kW}, \text{TA} \times 25\%)$ ,
  - where  $\text{TA} = \text{Max} (0, (\text{GenTNUoS}_z \times X))$ ;
  - where  $X$  is a multiplier, initially taking the value eight, although it may be appropriate that this be amended in subsequent transmission price control periods
  - Where  $t = 2$ ,  $\text{UCA}_t = \text{Min} (\text{£}2/\text{kW}, \text{TA} \times 25\%)$ ; and
  - Where  $t \geq 3$ ,  $\text{UCA}_t = \text{Min} (\text{£}3/\text{kW}, \text{TA} \times 25\%)$ .

## BC Cancellation Amount

- 2.13 Should a **User** terminate its **Construction Agreement** prior to the **Completion Date** but on or after its **Trigger Date** it shall be liable to pay the **BC Cancellation Amount** calculated as follows:

*Cancellation Amount*

$$(a) = \text{TEC}_r \times \text{CAM}_t$$

Where:

- *TEC* expressed in kW.
- *CAM<sub>t</sub>* which varies according to the number of full years from the Completion Date:
  - In the year prior to the Completion Date ( $t=0$ )  $\text{CAM} = \text{TA} \times 100\%$ ,
  - where  $\text{TA} = \text{Max} (0, (\text{GenTNUoS}_z \times X))$ ;
  - Where  $X$  is a multiplier, initially taking the value eight, although it may be appropriate that this be amended in subsequent transmission price control periods
  - Where  $t=-1$ ,  $\text{CAM} = \text{TA} \times 75\%$ ;
  - Where  $t=-2$ ,  $\text{CAM} = \text{TA} \times 50\%$ ; and
  - Where  $t=-3$ ,  $\text{CAM} = \text{TA} \times 25\%$ .

and

$$(b) = \text{LCN} \times \text{LCAM}_t$$

Where:

- $LCN$  is expressed in kW.
- $LCAM_t$  which varies according to the number of full years from the Completion Date:
  - In the year prior to the Completion Date ( $t=0$ )  $LCAM = TA \times 100\%$ ,
  - where  $TA = \text{Max}(0, (\text{LocGenTNUoS}_n \times X))$ ,
  - Where  $X$  is a multiplier, initially taking the value 8, although it may be appropriate that this be amended in subsequent price control periods.
  - Where  $\text{LocGenTNUoS}_n$  is the relevant nodal local generation TNUoS tariff applicable as published in the Statement of use of System Charges for the financial year in which the last day the offer of the Bilateral Connection Agreement or Bilateral Embedded Generation Agreement and associated construction Agreement could be accepted falls;
  - Where  $t=-1$ ,  $LCAM = LTA \times 75\%$ ;
  - Where  $t=-2$ ,  $LCAM = LTA \times 50\%$ ; and
  - Where  $t=-3$ ,  $LCAM = LTA \times 25\%$ .

### 3 AC Cancellation Charge

- 3.1 Should a **User** terminate its **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** with **The Company** at any time on or after the **Completion Date** it shall become liable to pay the **AC Cancellation Charge** calculated as follows.

$$AC \text{ Cancellation Charge} = TEC \times \text{Max}(0, \text{GenTNUoS}_z) \times n$$

Where:

- $TEC$  is expressed in kW.
- $\text{GenTNUoS}_z$  is the relevant prevailing zonal Generation TNUoS tariff.
- $n$  is the number of years remaining in the Tec Period.

## **PART TWO**

### **1. CAPACITY REDUCTION CHARGE**

Where a **User** decreases its **TEC**, such **User** shall be liable to pay to **The Company** the **Capacity Reduction Charge** calculated as follows:

#### **Capacity Reduction Charge Prior to the Trigger Date**

- 1.1 In the event a **User** decreases the **TEC** value in Appendix C of its **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** prior to the **Trigger Date** it shall be liable to pay a **Capacity Reduction Charge** to **The Company** calculated as follows.

$$\text{Capacity Reduction Charge} = UCA_t \times (TEC - TEC_r)$$

- Where the UCA is calculated in accordance with Paragraph 2.13 above;
- TEC is the TEC figure (expressed in kW) stated in Appendix C to the Users Bilateral Agreement effective immediately prior to the requested reduction in TEC; and,
- $TEC_r$  is the revised TEC figure (expressed in kW) following the TEC reduction

#### **Capacity Reduction Charge on or after the Trigger Date but before the Completion Date**

- 1.2 In the event a **User** decreases the **TEC** and/or **LCN** value in Appendix C of its **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** on or after the **Trigger Date** but prior to the **Completion Date** it shall be liable to pay a **Capacity Reduction Charge** to **The Company** calculated as follows.

*Capacity Reduction Charge =*

$$(a) \quad CAM_t \times (TEC - TEC_r)$$

- Where  $CAM_t$  is calculated in accordance with paragraph 2.12(a) above.
- TEC is the TEC figure (expressed in kW) stated in Appendix C to the Users Bilateral Connection Agreement or effective immediately prior to the requested reduction in TEC
- $TEC_r$  is the revised TEC figure (expressed in kW) following the TEC reduction

and

$$(b) = LCAM_t \times (LCN - LCN_r)$$

- Where  $LCAM_t$  is calculated in accordance with Error! Reference source not found. above

- LCN is the LCN figure (expressed in kW) stated in Appendix C to the Users Bilateral Connection Agreement or Bilateral Embedded Generation Agreement effective immediately prior to the requested reduction in LCN
- $LCN_r$  is the revised LCN figure (expressed in kW) following the LCN reduction

1.3 Following a reduction in **LCN** and/or **TEC**, and after payment of the **Capacity Reduction Charge The Company** shall adjust the **Cancellation Charge** liabilities and associated security obligations to reflect the reduced **LCN** and/or **TEC**.

**Capacity Reduction Charge on or after the Completion Date**

1.4 In the event a **User** decreases the **TEC** value in Appendix C of its **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** on or after the **Completion Date** it shall be liable to pay a **Capacity Reduction Charge** to **The Company** calculated as follows.

$$\text{Capacity Reduction Charge} = (TEC - TEC_r) \times \text{Max}(0, \text{GenTNUoS}_z) \times n$$

Where:

- $TEC$  is the TEC figure (expressed in kW) stated in Appendix C to the Users Bilateral Connection Agreement or effective immediately prior to the requested reduction in TEC
- $TEC_r$  is the revised TEC figure (expressed in kW) following the TEC reduction.
- $\text{GenTNUoS}_z$  is the relevant prevailing zonal Generation TNUoS tariff.
- $n$  is the number of years of the TEC Period remaining.

1.5 There is no **Capacity Reduction Charge** payable in respect of a reduction in **LCN** on or after the **Completion Date**

1.6 Valued added tax will be payable on any **Capacity Reduction Charge**.

## **PART THREE**

### **1. CREDIT REQUIREMENTS**

Where a **User** has a **Construction Agreement** it shall provide security for the **BC Cancellation Charge** and **Final Sums** in accordance with this Schedule 4 Part Three.

### **2. Each **User** which has a **Construction Agreement** shall provide security in respect of each of its **Construction Agreement**:**

2.1 in the case of a **User** which meets **The Company Credit Rating** at the date of the **Construction Agreement** in accordance with Paragraph 3; and

2.2 in the case of a **User** which does not meet **The Company Credit Rating** at the date of the **Construction Agreement** or thereafter ceases to meet it, in accordance with Paragraph 4.

### **3. PROVISION OF SECURITY WHERE USER MEETS THE COMPANY CREDIT RATING**

3.1 The **User** shall as soon as possible after entering into a **Construction Agreement** and in any event no later than one (1) month after the date of the same confirm to **The Company** whether it meets **The Company Credit Rating**. Thereafter not less than 75 days before the relevant **Security Period** until 28 days after the **Completion Date** the **User** shall confirm to **The Company** whether it meets **The Company Credit Rating** (which in the case of a long term private credit rating shall be confirmed by Standard and Poor's or Moody's within a period of 45 days prior to the date of confirmation). The **User** shall inform **The Company** in writing forthwith if it becomes aware of no longer meeting **The Company Credit Rating** or if it is or is likely to be put on credit watch or any similar credit surveillance procedure which may give **The Company** reasonable cause to believe that the **User** may not be able to sustain meeting **The Company Credit Rating** for at least 6 months in the case of **Final Sums** or 12 months in the case of **BC Cancellation Charge**.

3.2 In the event that the **User** has elected to provide **The Company** with an indicative credit rating and **The Company** is of the reasonable opinion that the **User** has ceased to comply with the requirements of Paragraph 3.1 then **The Company** may require the **User** forthwith:

(i) to apply to Standard and Poor's and/or Moody's for a further indicative long term private credit rating; or

- (ii) to confirm to **The Company** that it shall provide the security referred to in Paragraph 3.4 below.

3.3 In the event of the **User**:

- (i) not meeting **The Company Credit Rating**; or
- (ii) having a credit rating below **The Company Credit Rating**; or
- (iii) not having obtained from Standard and Poor's or Moody's within 30 days of the written notification under Paragraph 3.2(i) above an indicative long term private credit rating,

or if **The Company** becomes aware that:

- (iv) the **User** ceases to meet **The Company Credit Rating**; or
- (v) the **User** is put on credit watch or other similar credit surveillance procedure as specified above which may give **The Company** reasonable cause to believe that the **User** may not be able to maintain **The Company Credit Rating** for at least 6 months in the case of **Final Sums** or 12 months in the case of the **BC Cancellation Charge**; or
- (vi) the **User** has not obtained from Standard and Poor's within 30 days of the written notification by **The Company** under Paragraph 3.2(i) above a further indicative long term private credit rating,

the **User** shall (where appropriate on receipt of written notification from **The Company**) comply with the terms of Paragraph 3.4.

- 3.4 The **User** shall within 21 days of the giving of a notice under Paragraph 3.3 or within 30 days of the **User** confirming to **The Company** under Paragraph 3.2(ii) that it will provide the security specified below (whichever is the earlier), provide **The Company** with the security specified below to cover the **User's Payment Obligations** arising in the event of, or which have arisen prior to, termination of this **Construction Agreement**. The security to be provided in the case of **Final Sums** shall be in an amount not greater than such sums payable on termination and specified in writing by **The Company** to the **User** from time to time and in accordance with the timescales specified in Paragraph 4 and in the case of the **BC Cancellation Amount** as set out in the **Construction Agreement** for the relevant **Security Period**.

- 3.5 The form of security provided shall be of a type set out in Paragraph 5.
- 3.6 Until the facts or circumstances giving rise to the obligations of the **User** to provide the security have ceased, then **The Company** provisions of Paragraph 4 shall apply in the Amending Agreement.
- 3.7 If the facts of circumstances giving rise to the obligation of the **User** to provide the security have ceased, then **The Company** shall release the security.

#### **4. PROVISION OF SECURITY WHERE USER DOES NOT MEET OR CEASES TO MEET THE COMPANY CREDIT RATING**

4.1 Each **User** hereby agrees that it shall at the date of the relevant **Construction Agreement** provide to **The Company** or procure the provision to **The Company** of, and the **User** shall until 28 days after the **Completion Date** (unless and until this **Construction Agreement** shall be terminated (and the **Final Sums** and/or **BC Cancellation Charge** shall have been paid) maintain or procure that there is maintained in full force and effect (including by renewal or replacement) a security arrangement from time to time and for the time being as set out in Paragraph 5 to provide security for the **User's** obligation to pay **Final Sums** and the **BC Cancellation Charge** to **The Company** on **Termination** of the **Construction Agreement**

#### **4.2 Final Sums: Provision of Bi-annual Estimate and Secured Amount Statement**

4.2.1 **The Company** shall provide to the **User** a **Bi-annual Estimate** showing the amounts of all payments required or which may be required to be made by the **User** to **The Company** in respect of **Final Sums** at the following times and in respect of the following periods:

- (i) forthwith on the signing of the **Construction Agreement**, in respect of the **First FS Security Period**; and
- (ii) not less than 75 (seventy-five) days (or if such day is not a **Business Day** the next following **Business Day**) prior to each **Subsequent FS Security Period** until the **Construction Agreement** shall be terminated and all sums due or which will or might fall due in respect of which security is to be provided shall have been paid.

4.2.2 Such **Bi-annual Estimate** shall be accompanied by the **Secured Amount Statement** specifying the aggregate amount to be secured at the beginning of and throughout each **FS Security Period**.

4.2.3 If **The Company** shall not provide any subsequent **Bi-annual Estimate** and **Secured Amount Statement** by the requisite date, then the **User** shall at the date it is next required to have in full force and effect security and whether by renewal or replacement or otherwise in respect of the following **FS Security Period** nonetheless provide security in accordance with the provisions of this **Construction Agreement** in the same amount as the amount then in force in respect of the then current **FS Security Period**.

4.2.4 Entitlement to Estimate

If **The Company** is (for whatever reason) unable on any relevant date to calculate precisely any sum due or which has accrued due or in respect of which the **User** has a liability to **The Company** for **Final Sums**, **The Company** shall be entitled to invoice the **User** for a sum equal to **The Company's** fair and reasonable estimate of the sums due or which may become due or in respect of which the **User** has a liability to **The Company** for payment. **The Company** shall also be entitled to send the **User** further invoices for such sums not covered in previous invoices. The **User** shall pay **The Company** all sums so invoiced by **The Company** within 14 days of the date of **The Company's** invoice (s) therefor.

4.3 **Demands not Affected by Disputes**

It is hereby agreed between **The Company** and the **User** that if there shall be any dispute between the **User** and **The Company** as to:-

4.3.1 any amount certified by **The Company** in any **Secured Amount Statement** as requiring at any time and from time to time to be secured; or

4.3.2 the fairness and reasonableness of **The Company's** estimate of **Final Sums**;  
or

4.3.3 whether the amount as required at any time to be secured has been calculated in accordance with the **User Commitment Principles**; or

4.3.4 whether there has been an **Event of Default** (under the **Construction Agreement** or the **CUSC**), or

4.3.5 the lawfulness or otherwise of any termination or purported termination of the **Construction Agreement**

such dispute shall not affect the ability of **The Company** to make demands pursuant to the security arrangement to be provided pursuant to this Schedule 4 and the **Construction Agreement** and to recover the amount or amounts payable thereunder, it being acknowledged by the **User** that but for such being the case **The Company's** security would be illusory by reason of the period of validity of the relevant security being likely to expire or capable of expiring before the final resolution of such dispute. The **User** accordingly covenants with **The Company** that it will not take any action, whether by way of proceedings or otherwise, designed or calculated to prevent, restrict or interfere with the payment to **The Company** of any amount secured under the security arrangement nor seek nor permit nor assist others to do so.

- 4.4 If there shall be any dispute as mentioned in Paragraph 4.3 above the same shall, whether **The Company** shall have terminated the **Construction Agreement** and recovered or sought to recover payment under the security arrangement or not, and without prejudice to **The Company's** right to recover or seek to recover such payment, be referred in the case of Paragraph 4.3.1, 4.3.2 and 4.3.3 to the **Independent Engineer** (and, for the avoidance of doubt the provisions of this **Construction Agreement** relating to the **Independent Engineer** for the purposes of this paragraph 4.4 shall survive termination) and, in the case of Paragraphs 4.3.4 and 4.3.5 be dealt with by referral to arbitration in accordance with the **Dispute Resolution Procedure**.

## 5. TIMINGS FOR AND TYPES OF SECURITY

- 5.1 The **User's Payment Obligation** shall be secured by any one of the following:-
- 5.1.1 A **Performance Bond** or **Letter of Credit** from a **Qualified Bank** for the **Final Sums Estimate** and/or **BC Cancellation Charge** for a given **FS Security Period** or **BC Security Period**, such **Performance Bond** or **Letter of Credit** to be **Valid** for at least that given **FS Security Period** or **BC Security Period** and to be renewed periodically where applicable in the manner stated in paragraph 5.2.3; or
- 5.1.2 A cash deposit in a **Bank Account** at least for the amount of the **Final Sums Estimate** and/or **BC Cancellation Charge** to be secured for a given **FS Security Period** or **BC Security Period**, such cash deposit to be increased or reduced periodically where applicable in the manner stated in paragraph 5.2.4; or
- 5.1.3 A **Performance Bond** from a **Qualified Company** for the amount of the for the **Final Sums Estimate** and/or **BC Cancellation Charge** to be secured for a given **FS Security Period** or **BC Security Period**, such **Performance Bond** to

be **Valid** for at least that **FS Security Period** or **BC Security Period** and to be renewed periodically where applicable in the manner stated in paragraph 5.2.3.

## 5.2. **GENERAL PROVISIONS**

5.2.1 Any **Notice of Drawing** to be delivered to Barclays Bank PLC or any other bank at which the **Bank Account** shall have been opened or a **Qualified Bank** or a **Qualified Company** may be delivered by hand, by post or by facsimile transmission.

5.2.2 If the **User** becomes aware that the bank issuing the **Performance Bond** or **Letter of Credit** ceases to be a **Qualified Bank** or that the company giving the **Performance Bond** ceases to be a **Qualified Company**, the **User** shall so notify **The Company** in writing as soon as it becomes so aware. If **The Company** becomes aware that the bank issuing the **Performance Bond** or **Letter of Credit** ceases to be a **Qualified Bank** or that the company giving the **Performance Bond** ceases to be a **Qualified Company**, **The Company** may notify the **User** to that effect in writing. Where the bank or the company so ceases to be either a **Qualified Bank** or a **Qualified Company** (as the case may be) as a consequence of **The Company** having reasonable cause to doubt the continued rating of the said bank or company, such notice shall be accompanied by a statement setting out **The Company's** reasons for having such doubt. The **User** shall within 21 days of the giving of such notice by **The Company** or the **User** whichever is the earlier provide a replacement **Performance Bond** and/or **Letter of Credit** from a **Qualified Bank** or **Qualified Company**, as the case may be, and/or provide a cash deposit in the required amount in a **Bank Account**. From the date the replacement **Performance Bond** or **Letter of Credit** or **Bank Account** cash deposit is effectively and unconditionally provided and **Valid**, **The Company** will consent in writing to the security which it replaces being released.

5.2.3 The following provisions shall govern the issuance, renewal and release of the **Performance Bond** or **Letter of Credit**:-

5.2.3.1 The **Performance Bond** or **Letter of Credit** shall be **Valid** initially for the **First FS Security Period** or first **BC Security Period**. Such **Performance Bond** or **Letter of Credit** shall be for an amount not less than the **BC Cancellation Charge** and/or **Final Sums Estimate** to be secured for that **First FS Security Period** and/or **BC Security Period**.

5.2.3.2 On a date which is at least 45 days (or if such day is not a **Business Day** then on the immediately preceding **Business Day**) before the start of each following **Subsequent FS Security Period** or **BC Security Period** such **Performance Bond** or **Letter of Credit** shall be renewed so as to be **Valid** for not less than such **FS Security Period** or **BC Security Period** and in the case of the last **FS Security Period** or **BC Security Period** to be **Valid**, unless **The Company** agrees otherwise, for 45 days after the last day of such **FS Security Period** or **BC Security Period**. Such renewed **Performance Bond** or **Letter of Credit** shall be for an amount not less than the amount of the for the **Final Sums Estimate** and/or **BC Cancellation Charge** to be secured during that **FS Security Period** or **BC Security Period**.

5.2.4 The following provisions shall govern the maintenance of cash deposits in the **Bank Account**:-

5.2.4.1 The amount of the cash deposit to be maintained in the **Bank Account** shall be maintained from the date of the **Construction Agreement** at least to the end of the **First FS Security Period** and/or **BC Security Period**. Such cash deposit shall be in the amount of the **Final Sums Estimate** and/or **BC Cancellation Charge** to be secured during that **First FS Security Period** or **First BC Security Period**.

5.2.4.2 If the amount of the **Final Sums Estimate** and/or **BC Cancellation Charge** to be secured from the start of each **Subsequent FS Security Period** or **BC Security Period** is an amount greater than the amount then secured, the cash deposit in the **Bank Account** shall be increased to such greater amount on the date which is 45 days before the start of the given **FS Security Period** or **BC Security Period**.

5.2.4.3 If the **Final Sums Estimate** and/or **BC Cancellation Charge** for a given **FS Security Period** or **BC Security Period** is smaller than the amount then secured, the cash deposit in the **Bank Account** shall not be reduced to the amount so stated until the expiry of 7 days after the start of that given **FS Security Period** or **BC Security Period** ("the **Release Date**").

5.2.4.4 The sum equal to the amount of reduction in the cash deposit in the **Bank Account** shall be paid by **The Company** to the **User** from the **Bank Account** on the **Release Date**.

5.2.4.5 Any interest accruing to the **Bank Account** shall be for the account of and belong to the **User** absolutely, and **The Company** agrees to take any steps

required to be taken by it for the release from the **Bank Account** and payment to the **User** of such interest as soon as the same shall have been credited to the **Bank Account** and **The Company** shall have received notice of such credit.

5.3 Notwithstanding any provision aforesaid:-

5.3.1 The **User** may provide different securities to **The Company** at any one time, each securing a different amount, provided that the aggregate amount secured by such securities shall be not less than the amount of the **Final Sums Estimate** and/or **BC Cancellation Charge** required to be secured for that **FS Security Period** or **BC Security Period**.

5.3.2 The **User** may upon the expiry of at least 14 days prior written notice to **The Company**, substitute one type of security for another provided that unless **The Company** shall otherwise agree in writing such substituted security must be **Valid** from the first day of the relevant **FS Security Period** or **BC Security Period** and committed at least 45 days before this in the following manner:-

(a) where a **Performance Bond** or a **Letter of Credit** is to substitute for other securities, it must be issued or given at least 45 days before the start of the **FS Security Period** or **BC Security Period** to which it relates.

(b) where a cash deposit in a **Bank Account** is to substitute for other securities, it must be deposited into the **Bank Account** at least 45 days before the start of the **FS Security Period** or **BC Security Period** to which it relates.

5.3.3 Upon request by the **User** to **The Company**, securities substituted in the aforesaid manner shall, providing the substitute security shall be **Valid**, be released on the first day of the **FS Security Period** or **BC Security Period** which the substitute security is securing. However, where the **Final Sums Estimate** and/or **BC Cancellation Charge** to be secured for any **FS Security Period** or **BC Security Period** is less than the amount required to be secured in the preceding **FS Security Period** or **BC Security Period**, the substituted security shall not be released until 7 days after the start of the **FS Security Period** or **BC Security Period** that that substitute security is securing.

## **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**<sup>1</sup> where our staff will be pleased to help.

1. **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.

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

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)** 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 [\[Paragraph 6.30.3 of CUSC\]](#) **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**<sup>2</sup> 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.

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<sup>2</sup> [www.nationalgrid.com/uk/electricity](http://www.nationalgrid.com/uk/electricity)

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 Company**<sup>3</sup> 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**<sup>4</sup> 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**<sup>5</sup>.
  
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 pre-requirement for TEC.**

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

<sup>4</sup> [www.nationalgrid.com/uk/electricity](http://www.nationalgrid.com/uk/electricity)

<sup>5</sup> [www.nationalgrid.com/uk/electricity](http://www.nationalgrid.com/uk/electricity)

- 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** Website<sup>6</sup>. 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](mailto:camdata@uk.ngrid.com)
- 21.** ~~20.~~ For the most up to date contact details applicants are advised to visit **The Company's** Website<sup>5</sup>.

# APPLICATION FOR A NEW CONNECTION

**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:.....

# APPLICATION FOR A NEW CONNECTION

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

.....

.....

Email:.....

Telephone:.....

Fax:.....

# APPLICATION FOR A NEW CONNECTION

## 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.

# APPLICATION FOR A NEW CONNECTION

**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)

# APPLICATION FOR A NEW CONNECTION

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

**SECTION B. THE PROPOSED POINT OF CONNECTION**

1. 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.

.....  
.....  
.....

# APPLICATION FOR A NEW CONNECTION

**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.

.....  
.....

6. If you are prepared to make available to **The Company** or, for **Connection Sites** in 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.

.....  
.....  
.....

# APPLICATION FOR A NEW CONNECTION

## 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.

.....  
.....

# APPLICATION FOR A NEW CONNECTION

**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.

.....  
.....  
.....

## **APPLICATION FOR A NEW CONNECTION**

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

## **APPLICATION FOR A NEW CONNECTION**

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

# APPLICATION FOR A NEW CONNECTION

**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 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** [ ]

# APPLICATION FOR A NEW CONNECTION

**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 Website<sup>5</sup> 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 applicable)

**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 Nomination .....MW and Transmission Entry Capacity.....MW**

# APPLICATION FOR A NEW CONNECTION

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

**Please state the required TEC Period (whole Financial Years). Please note that where LCN Works are identified this cannot be less than 3.**

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 Availability** being issued YES/NO

# APPLICATION FOR A NEW CONNECTION

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

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 [ ]**

**After [ ]**

## APPLICATION FOR A NEW CONNECTION

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

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

No

[Note: are the above necessary/practical?]

# APPLICATION FOR A NEW CONNECTION

**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.

~~v1.8-24<sup>th</sup> May 2008~~

CAP 165– Version 1 – 30 November 2008

## 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**



~~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.~~10. 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**<sup>1</sup> 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

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<sup>1</sup> 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**.
8. In the course of processing your 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 your authorisation to the release to the **Public Distribution System Operator(s)** or the **Relevant Transmission Licensees** of certain information contained in your 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)** 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**<sup>2</sup> 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**

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<sup>2</sup> [www.nationalgrid.com/uk/electricity](http://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**<sup>3</sup>.
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](mailto:camdata@uk.ngrid.com)
18. ~~17.~~ For the most up to date contact details applicants are advised to contact **The Company Website**<sup>3</sup>.

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<sup>3</sup> [www.nationalgrid.com/uk/electricity](http://www.nationalgrid.com/uk/electricity)

# APPLICATION FOR USE OF SYSTEM

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:.....

## APPLICATION FOR USE OF SYSTEM

**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.

.....  
.....

## APPLICATION FOR USE OF SYSTEM

**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)**

## APPLICATION FOR USE OF SYSTEM

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

**SECTION B: THE PROPOSED SITE OF CONNECTION TO A DISTRIBUTION SYSTEM**

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.

.....  
.....  
.....

# APPLICATION FOR USE OF SYSTEM

**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 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) [ ]

## APPLICATION FOR USE OF SYSTEM

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

.....

.....  
**The Company's Website<sup>4</sup>** provides more information on the terms it offers for such technical capability.

5. Please state the required **Local Capacity Nomination and Transmission Entry Capacity**.....MW

**Please state the required TEC Period [whole Financial Years]. Please note that where LCN Works are identified this cannot be less than 3.**

**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.

.....

.....

.....

---

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

## APPLICATION FOR USE OF SYSTEM

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

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

**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**

**After**

**If after please give timescales**

.....  
.....  
.....  
.....

**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**

**No**

## APPLICATION FOR USE OF SYSTEM

**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.

## APPLICATION FOR USE OF SYSTEM

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 :

<b>Embedded Generator</b>	<input type="checkbox"/>
<b>Distribution Interconnector Owner</b>	<input type="checkbox"/>
<b>Small Power Station Trading Party</b>	<input type="checkbox"/>

[Please tick correct option].

SIGNED BY:

.....  
For and on behalf of the **Applicant**

Date:.....

**END OF EXHIBIT D**

## **APPLICATION FOR USE OF SYSTEM**

**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** (power station with **Design Variation only**)]
  
- 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**

## **Part B - Text to give effect to WGAA2**

<b>WGAA2</b>	Text as WGAA1 except as follows
<b>Schedule 2 Exhibit B</b> (Construction Agreement)	New form as attached providing for BC Cancellation Charge by fixed profile of estimated costs of works
<b>Sch 4</b>	Amended as follows Part One Paragraph 2 shall be deleted and replaced as below Part Two 1.1 shall be deleted and replaced as below and 1.2 shown as not used Part 3, reference to Final Sums throughout and to Para 4.2 shall be deleted Reference to Security period shall be read as reference to BC Security period
<b>Section 11</b> Definition of BC Cancellation Charge deleted and replaced as follows	The Company's estimate of the Actual BC Cancellation Charge Costs as calculated in accordance with the User Commitment Principles.
Delete definitions of	BC Cancellation Amount, User Commitment Amount, FS Security Period, "First FS Security Period" FS Security Period Security Period and Subsequent Security Period
New defs as follows Actual BC Cancellation Charge Costs	means as defined in a User's Construction Agreement.

"WGAA2 Amendments to Schedule 4

**1 BC CANCELLATION CHARGE**

- 1.1 In making an **Offer** to a **User** **The Company** will consider the **Construction Works** and **Construction Programme** associated with that **Offer** and taking into account the nature and programming of the **Construction Works** will identify the costs and spend profile of the **Construction Works**.
- 1.2 The **Construction Agreement** will set out the **Cancellation Charge** by reference to specified **Cancellation Periods** payable in the event of termination based the costs and spend profile as identified as above and identifying these amounts. This would be fixed except as provided for in the **Construction Agreement** or subject to any revision as a result of a **Modification Application**.
- 1.3 As provided for in the **Construction Agreement**, **The Company** will undertake a reconciliation exercise after termination of a **Construction Agreement** and in the event that the **Actual BC Cancellation Charge** (as defined in the Construction Agreement) in

respect of the **Construction Works** is less than the **BC Cancellation Charge** will reimburse the **User** the difference.”

“PART TWO

**Capacity Reduction Charge Prior to the Completion Date**

- 1.1 In the event a **User** decreases the **TEC** and/or **LCN** value in Appendix C of its **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** on or after the **Trigger Date** but prior to the **Completion Date** it shall be liable to pay a **Capacity Reduction Charge** to **The Company** calculated as the fees, expenses and costs (whether external or internal) paid, payable or incurred by **The Company** in respect of those elements of the **Construction Works** no longer required as a result of such reduction taking effect.”

**SCHEDULE 2 EXHIBIT 3 PART [x]**

**INDICATIVE**

**DATED [ ] 200[1]**

**NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)**

**and**

**[ ] (2)**

---

**THE CONNECTION AND USE OF SYSTEM CODE**

**CONSTRUCTION AGREEMENT**

---

***Proforma for Power Station Directly Connected to the GB Transmission System and Embedded Power Stations which are the subject of a BEGA***

CONTENTS

<u>Clause</u>	<u>Title</u>
1	Definitions, Interpretation and Construction
2	Carrying out of the Works
3	Delays
4	Commissioning Programme and Liquidated Damages
5	Approval to Connect/Energise/Become Operational
6	Independent Engineer
7	Becoming Operational
8	Compliance with Site Specific Technical Conditions
9	Security Requirements and BC Cancellation Charge Reconciliation
10	Event of Default
11	Termination on Event of Default
12	Term
13	CUSC
14	Disputes
15	Variations
Appendix B1	One Off Works
Appendix G	Transmission Connection Asset Works
Appendix H	Transmission Reinforcement Works
Appendix I	User's Works
Appendix J	Construction Programme

CUSC v1.5

Appendix K Liquidated Damages

Appendix L Independent Engineer

Appendix N Third Party Works

Appendix R Cancellation Charge

*[this will set out the BC Cancellation Charges as calculated in accordance with User Commitment Principles, the profile of the charge and from that the cancellation periods.]*

**THIS CONSTRUCTION AGREEMENT** is made on the [ ] day of [ ] 200[1]

**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** has prepared 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 to its connection to] [or use of] the **GB Transmission System** and pursuant to Standard Condition C8 of the **Transmission Licence**, **The Company** is required to offer terms in accordance with the **CUSC** in this respect **or** [specific recital to reflect that the **Construction Agreement** is an amendment of an existing signed offer pursuant to the **CUSC** amending documents]
- (C) **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).
- (D) Certain works are required as part of this offer as set out in this **Construction Agreement**. These works are required for the purposes of the [Local Capacity Nomination] [Local Capacity Nomination and Transmission Entry Capacity].
- (E) This **Construction Agreement** is entered into pursuant to the terms of the **CUSC**.

**NOW IT IS HEREBY AGREED** as follows:

**1. 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** and in the Bilateral Connection Agreement have the same meanings, interpretations or constructions in this **Construction Agreement**.

“Actual BC Cancellation Charge” the amount payable by the **The Company** on termination of this **Construction Agreement** being the aggregate of:-

- (1) all **The Company Engineering Charges** arisen prior to the date of termination;
- (2) fees, expenses and costs (excluding costs on account of interest charges incurred by **The Company**) of whatever nature reasonably and properly incurred or due by **The Company** in respect of any part of the **Construction Works** carried out prior to the date of termination of this **Construction Agreement**;
- (3) fees, expenses and costs properly payable by **The Company** in respect of, or arising from the termination by it or any third party of any contract for or relating to the carrying out of any **Construction Works** provided it is negotiated on an arms length basis (including any such arising under the **STC**);
- (4) fees, expenses and costs due in accordance with Clause 2.4.1;
- (5) a sum equal to the reasonable costs of removing any **Transmission Connection Assets** and of making good the remaining plant and apparatus following such removal; and
- (6) interest on any such amounts from the date they were paid by **The Company** to the date of **The Company's** invoice at 2% over **Base Rate** from time to time and for the time being.

Any dispute as to the amount of the

	<b>Actual Cancellation Charge Costs</b> shall be referred to arbitration in accordance with the <b>Dispute Resolution Procedure</b> .
"Bilateral Connection Agreement"	the <b>Bilateral Connection Agreement</b> entered into between the parties on even date herewith.
"Backstop Date"	the date specified as such in the <b>Construction Programme</b> .
"Bilateral Embedded Generation Agreement"	the <b>Bilateral Embedded Generation Agreement</b> entered into between the parties on even date herewith.
"BC Cancellation Charge"	the sum calculated in accordance with the <b>User Commitment Principles</b> payable by the <b>User</b> on termination of this <b>Construction Agreement</b> such sum being that specified in the Table in Appendix R by reference to the <b>Cancellation Period</b> in which this <b>Construction Agreement</b> is terminated.
Cancellation Period(s)"	the [periods][calendar years] identified within the <b>Cancellation Charge</b> profile and specified in Appendix R.
"Capacity Reduction Charge"	the sum calculated in accordance with the <b>User Commitment Principles</b> payable by the <b>User</b> under Clause 2.17 and Clause 7 in respect of a reduction in <b>LCN</b> and/or <b>TEC</b> prior to the <b>Completion Date</b> .
"Charging Date"	the date upon which the <b>Construction Works</b> are first <b>Commissioned</b> and available for use by the <b>User</b> or if the <b>Independent Engineer</b> before, on or after the <b>Commissioning Programme Commencement Date</b> shall have certified in writing that the <b>Transmission Connection Assets</b> , are completed to a stage where <b>The Company</b> could commence commissioning and by such date the <b>User's Works</b> shall not have

	<p>been so certified then the date falling [ ] days after the date of such certification, provided that the [Transmission Reinforcement Works] [LCN Transmission Reinforcement Works] are <b>Commissioned</b> and <b>Seven Year Statement Works</b> are completed as at that date. In the event that the [Transmission Reinforcement Works] [LCN Transmission Reinforcement Works] are not so <b>Commissioned</b> and/or the <b>Seven Year Statement Works</b> are not so completed the <b>Charging Date</b> shall be the date on which they are <b>Commissioned</b> and/or completed as appropriate.</p>
“Commissioning Programme Commencement Date”	the date specified in the <b>Construction Programme</b> for the commencement of the <b>Commissioning Programme</b> or any substituted date fixed under the terms of this <b>Construction Agreement</b>
“Commissioning Programme”	the sequence of operations/tests necessary to connect the <b>User’s Works</b> and the <b>Transmission Connection Asset Works/LCN Transmission Reinforcement Works</b> to the <b>GB Transmission System</b> for the purpose of making the <b>User’s Works</b> available for operation to be determined pursuant to Clause 2.10 of this <b>Construction Agreement</b> .
“Completion Date”	[ ] or such other date as may be agreed in terms of this <b>Construction Agreement</b> .
“Connected Planning Data”	data required pursuant to the <b>Planning Code</b> which replaces data containing estimated values assumed for planning purposes by validated actual values and updated estimates for the future and by updated forecasts for forecast data items.
“Consents”	in relation to any <b>Works</b> :-  (a) all such planning and other

- (b) statutory consents; and
  - (b) all wayleaves, easements, rights over or interests in land or any other consent; or
  - (c) permission of any kind as shall be necessary for the construction of the **Works** and for commencement and carrying on of any activity proposed to be undertaken at or from such **Works** when completed.
- “Construction Programme” the agreed programme for the **Works** to be carried out by **The Company** and the **User** set out in detail in Appendix [J] to this **Construction Agreement** or as amended from time to time pursuant to Clauses 2.3 and 3.2 of this **Construction Agreement**.
- “Construction Site” the site where the **Transmission Connection Asset Works** are being undertaken by or on behalf of **The Company**;
- “Construction Works” the **Transmission Connection Asset Works, Transmission Reinforcement Works, Seven Year Statement Works** and **One Off Works** and such additional works as are required in order to comply with any relevant **Consents** relating to any such works but excluding for the avoidance of doubt any **Third Party Works**.
- “Dispute Resolution Procedure” the procedure for referral to arbitration set out in Paragraph 7.4 of the **CUSC**.
- “Event of Default” any of the events set out in Clause 10 of this **Construction Agreement** as constituting an event of default.
- “Independent Engineer” the engineer specified in Appendix L to this **Construction Agreement**. Provided that:-
- (a) where the parties fail to agree on a suitable engineer within 120 days of the date of this

**Construction Agreement; or**

- (b) where any **Independent Engineer** appointed from time to time shall fail, refuse or cease to act in the capacity set out herein and no substitute engineer of suitable standing and qualification can be agreed by the parties within 30 days;

then such engineer as the President of the Institution of Engineering and Technology shall, on the application of either party, nominate shall be the **Independent Engineer**.

“Liquidated Damages”

the sums specified in or calculated pursuant to Appendix K to this **Construction Agreement**.

“LCN Transmission Reinforcement Works”

those works other than the **Transmission Connection Asset Works, Seven Year Statement Works and One Off Works**, which in the reasonable opinion of **The Company** are necessary to extend or reinforce the **GB Transmission System** in relation to and prior to the operation of the **User’s Equipment** at the **Connection Site** for the purposes of its **Local Capacity Nomination** and which are specified in Appendix H Part 1 to this **Construction Agreement**.

“Notice of Intent”

the notice issued by **The Company** pursuant to Clause 7.4.4

“Notice of Reduction”

the notice issued by **The Company** pursuant to Clause 7.4.7 including a revised Appendix C specifying the revised **Local Capacity Nomination** and/or **Transmission Entry Capacity**.

“One Off Works”

the works described in Appendix B1 to this **Construction Agreement**.

“Preliminary Request”

the request issued by **The Company** pursuant to Clause 7.4.1.

“Reduction Fee”	the fee payable by the <b>User</b> to <b>The Company</b> in respect of the agreement to vary issued pursuant to Clause 7.4.9 such fee being calculated on the same basis as that set out in the <b>Charging Statements</b> as payable on a payment of actual costs basis in respect of a <b>Modification Application</b> .
“Seven Year Statement Works”	the works set out in Table B2 of the statement prepared by <b>The Company</b> pursuant to Standard Condition C11 of the <b>Transmission Licence</b> and issued by <b>The Company</b> in [ ] which in <b>The Company’s</b> reasonable opinion are required to be completed before the <b>Completion Date</b> to ensure that the <b>GB Transmission System</b> complies with the requirements of Standard Condition C17 of the <b>Transmission Licence</b> and Standard Condition D3 of any <b>Relevant Transmission Licensee’s</b> transmission licence prior to the <b>Connection</b> of the <b>User’s Equipment</b> in terms of Clause 7.1 [or 7.2] of this <b>Construction Agreement</b> .
“TEC Transmission Reinforcement Works”	those works other than the <b>Transmission Connection Asset Works, Seven Year Statement Works</b> and <b>One Off Works</b> , which in the reasonable opinion of <b>The Company</b> are necessary to extend or reinforce the <b>GB Transmission System</b> in relation to and prior to the operation of the <b>User’s Equipment</b> at the <b>Connection Site</b> for the purposes of its <b>Transmission Entry Capacity</b> and which are specified in Appendix H Part 2 to this <b>Construction Agreement</b> .
“Term”	the term of this <b>Construction Agreement</b> commencing on the date hereof and ending in accordance with Clause 12.
“Third Party Works”	the works to be undertaken on assets

	belonging to a party other than <b>The Company</b> and the <b>User</b> to enable it to provide or as a consequence of the connection to and/or use of the <b>GB Transmission System</b> by the <b>User</b> as specified in Appendix N;
"Transmission Connection Assets"	the assets specified in Appendix A to the <b>Bilateral Connection Agreement</b> .
"Transmission Connection Asset Works"	the works necessary for construction and installation of the <b>Transmission Connection Assets</b> at the <b>Connection Site</b> specified in Appendix G to this <b>Construction Agreement</b> .
"Transmission Reinforcement Works"	the <b>LCN Transmission Reinforcement Works</b> and <b>TEC Transmission Reinforcement Works</b> .
"User Commitment Principles"	the methodology relating to the application and calculation of the <b>BC Cancellation Charge</b> and <b>Capacity Reduction Charge</b> set out in <b>CUSC</b> Schedule 4 as it may be amended from time to time.
"User's Works"	those works necessary for installation of the <b>User's Equipment</b> which are specified in Appendix I to this <b>Construction Agreement</b> .
"Works"	the <b>Construction Works</b> and the <b>User's Works</b> .

## 2. CARRYING OUT OF THE WORKS

- 2.1 Forthwith following the date of this **Construction Agreement** (i) in respect of **Connection Sites** in England and Wales **The Company** and the **User** shall agree the **Safety Rules** and **Local Safety Instructions** to apply during the **Construction Programme** and **Commissioning Programme**; and (ii) in respect of **Connection Sites** in Scotland the **User** shall agree with the **Relevant Transmission Licensee** the **Safety Rules** and **Local Safety Instructions** to apply during the **Construction Programme** and **Commissioning Programme**. Failing agreement within three months of the date of this **Construction Agreement** the matter shall be referred to the **Independent Engineer** for determination in accordance with Clause 6 of the **Construction Agreement**.

2.2 Subject to Clauses 2.3 and 2.4 of this **Construction Agreement** forthwith following the date of this **Construction Agreement** **The Company** shall use its best endeavours to obtain in relation to the **Construction Works**, and the **User** shall use its best endeavours to obtain in relation to the **User's Works**, all **Consents**. Each shall give advice and assistance to the other to the extent reasonably required by the other in the furtherance of these obligations. Further, each party shall, so far as it is legally able to do so, grant to, in relation to **Connection Sites** in England and Wales, the other, or in relation to **Connection Sites** in Scotland, the **Relevant Transmission Licensee**, all such wayleaves, easements, servitude rights, rights over or interests (but not estates as regards land in England and Wales and not heritable or leasehold interests as regards land in Scotland) in land or any other consents reasonably required by the other or the **Relevant Transmission Licensee** in order to enable the **Works** to be expeditiously completed and to enable that other to carry out its obligations to the other under this **Construction Agreement** and in all cases subject to such terms and conditions as are reasonable.

2.3 The following additional provisions shall apply in respect of the **Consents** and **Construction Works**:-

2.3.1 All dates specified in this **Construction Agreement** are subject to **The Company** obtaining **Consents** for the **Construction Works** in a form acceptable to it within the time required to carry out the **Construction Works** in accordance with the **Construction Programme**.

2.3.2 In the event of:-

- (a) the **Consents** not being obtained by the required date; or
- (b) the **Consents** being subject to conditions which affect the dates; or
- (c) **The Company** wishing to amend the **Construction Works** to facilitate the granting of the **Consents**,

**The Company** shall be entitled to revise the **Construction Works** (and as a consequence Appendix A and Appendix R to the **Bilateral Connection Agreement**) and all dates specified in this **Construction Agreement** and the charges specified in Appendix B to the **Bilateral Connection Agreement**. For the avoidance of doubt such revisions shall be at **The Company's** absolute discretion and the consent of the **User** is not required.

2.3.3 The **User** shall be regularly updated by **The Company** in writing or by such other means as the parties may agree as to progress made by **The Company** from time to time in the obtaining of relevant **Consents** pursuant to its obligations under Clause 2.2 or 2.3 of this **Construction Agreement**.

2.4.1 The **User** shall be liable to pay to **The Company** as part of any **Final Sums** due:-

- (a) all **The Company 's Engineering Charges** accrued; and
- (b) proper and reasonable out-of-pocket expenses incurred and/or paid or which **The Company** is legally bound to incur or pay

in seeking and obtaining the **Consents** the subject of Clause 2.2 of this **Construction Agreement** in respect of the **Construction Works**.

The **User** acknowledges these out of pocket ancillary expenses may include planning inquiries or appeals and the capital costs together with reasonable legal and surveyors costs of landowners or occupiers in acquiring permanent easements or other rights in respect of any electric line or underground cable forming part of the **Transmission Connection Asset Works**. This sum shall not include any capital costs incurred by **The Company**, in relation to **Connection Sites** in England and Wales, in the acquisition by it of the freehold of any land or any **Relevant Transmission Licensee**, in relation to **Connection Sites** in Scotland, in the acquisition by it of the freehold of any land. **The Company** shall keep the **User** informed of the level of such charges and expenses being incurred. .

2.4.2 Paragraphs 11.2.3 to 11.2.5 of the **CUSC** relating to **Consents** shall apply to the **Construction Agreement** as if set out here in full.

2.5 The **User** shall have the right to terminate this **Construction Agreement** at any time upon giving not less than 7 (seven) days notice in writing to **The Company**. Upon such termination the provisions of Clause 11 shall apply.

2.6 If the **User** fails to obtain all **Consents** for the **User's Works** having complied with the obligations in Clause 2.2 of this **Construction Agreement** the obligation on the **User** to complete the **User's Works** shall cease and the **User** may by written notice to **The Company** terminate this **Construction Agreement**. Upon such termination the provisions of Clause 11 shall apply. under

2.7 Both parties shall be entitled to contract or sub-contract for the carrying out of their respective parts of the **Works** (which in the case of **The Company** shall include work carried out by a **Relevant Transmission Licensee** or its contractors or sub-contractors). The **User** or any contractor on its behalf shall be responsible for commencing and for carrying out the **User's Works** to such stage of completion as shall render them capable of being **Commissioned** in accordance with the **Construction Programme** and **The Company** or any contractor on its behalf shall be responsible for commencing and carrying out the **Construction Works** to such stage of completion as shall render them capable of being **Commissioned** in accordance with the **Construction Programme**.

- 2.8 The parties shall continuously liaise throughout the **Construction Programme** and **Commissioning Programme** and each shall provide to the other all information relating to its own **Works** reasonably necessary to assist the other in performance of that other's part of the **Works**, and shall use all reasonable endeavours to coordinate and integrate their respective part of the **Works**. There shall be on-site meetings between representatives of the parties at intervals to be agreed between the parties. Each party shall deliver to the other party a written report of progress during each calendar quarter within 7 days of the end of that quarter.
- 2.9 During the period of and at the times and otherwise as provided in the **Construction Programme** and the **Commissioning Programme** **The Company** shall allow the **User**, its employees, agents, suppliers, contractors and sub-contractors necessary access to the **Construction Site** and the **User** shall allow **The Company** or, in the case of **Connection Sites** in Scotland, the **Relevant Transmission Licensee** and in either case their employees, agents, suppliers, contractors and sub-contractors necessary access to its site to enable each to carry out the **Transmission Connection Asset Works** and **One Off Works** or **User's Works** but not so as to disrupt or delay the construction and completion of the other's **Works** on the said sites or the operation of the other's **Plant** and **Apparatus** located thereon, such access to be in accordance with any reasonable regulations relating thereto made by the site owner or occupier.
- 2.10 Not later than six months prior to the **Commissioning Programme Commencement Date** **The Company** shall provide the **User** with a draft **Commissioning Programme** for the **Commissioning** of the **Transmission Connection Assets**, and the **User's Equipment**. The **User** shall, as quickly as practicable and in any event within three months of receipt thereof, determine whether or not to approve the proposed **Commissioning Programme** (which approval shall not be unreasonably withheld or delayed) and shall within such three month period either notify **The Company** of its approval or, in the event that the **User** reasonably withholds its approval, notify **The Company** of any changes or variations to the proposed commissioning programme recommended by the **User**. If **The Company** does not accept such changes or variations submitted by the **User** any dispute shall be referred to the **Independent Engineer** for determination. The **Commissioning Programme** agreed between the parties or determined by the **Independent Engineer** as the case may be shall be implemented by the parties and their sub-contractors in accordance with its terms.
- 2.11 If at any time prior to the **Completion Date** it is necessary for **The Company** or **The Company** in its reasonable discretion wishes to make any addition to or omission from or amendment to the **Transmission Connection Asset Works** and/or **Transmission Reinforcement Works** and/or the **One Off Works** and/or the **Third Party Works** **The Company** shall notify the **User** in writing of such addition, omission or amendment and Appendices [B1 (One Off Works), G (**Transmission Connection Asset Works**) H (**Transmission Reinforcement Works**) and N (**Third Party Works**)] to this **Construction**

**Agreement** and consequently Appendix R to this **Construction Agreement** and Appendices [A (**Transmission Connection Assets**) and B (**Connection Charges** and **One Off Charges**)] to the associated **Bilateral Connection Agreement** shall be automatically amended to reflect the change.

- 2.12 [The **User** shall apply to the Secretary of State for the Department of Energy and Climate Change as part of its application under Section 36 of the Act for its generating station, for deemed planning permission in relation to the substation forming part of the **Transmission Connection Asset Works**. The **User** shall use its best endeavours to procure that the said deemed planning permission is so obtained. **The Company's** obligations under Clause 2.2 of this **Construction Agreement** shall not require it to obtain planning consent for the said substation unless and until the Secretary of State for the Department of Energy and Climate Change shall for whatever reason refuse to deem the grant of planning permission in respect of the same. The **User** shall liaise with **The Company** as to its construction and operational requirements and shall ensure that the said application meets **The Company's** requirements. **The Company** shall provide the **User** with all information reasonably required by it in relation to the application and the **User** shall ensure that all requirements of **The Company** are incorporated in the application for deemed planning consent.]
- 2.13 [The **Transmission Reinforcement Works** are conditional on British Energy Generation Limited and/or Magnox Electric plc (as the case may be) granting approval to the carrying out of the **Construction Works** in terms of the Nuclear Site Licence Provisions Agreement being an agreement dated 30 March 1990 between The Company and Nuclear Electric plc (now called Magnox Electric plc) and an agreement dated 31 March 1996 between The Company and British Energy Generation Limited (and described as such). In the event of British Energy Generation Limited and/or Magnox Electric plc (as the case may be) not granting approval **The Company** shall be entitled to change the **Construction Works**, the **Construction Programme** and all dates specified in and Appendix R to this **Construction Agreement**.]
- 2.14 [It is hereby agreed and declared for the purposes of the Construction (Design and Management) Regulations 2007 that the **User** is the only client in respect of the **User's Works** and **The Company** is the only client in respect of the **Construction Works** and each of the **User** and **The Company** shall accordingly discharge all the duties of clients under the said **Regulations**.]
- 2.15 [**The Company** and the **User** hereby agree and acknowledge that this **Construction Agreement** is not to be treated as a construction contract within the meaning of section 104 of the Housing Grants, Construction and Re-generation Act 1996 and sections 104 to 113 of the said Act shall have no application either to the **Construction Works** or the **User's Works** and the parties' rights and obligations with regard to matters of dispute resolution and payment procedures are as expressly set out herein.
- 2.16 **Third Party Works**

- 2.16.1 The **User** shall be responsible for carrying out or procuring that the **Third Party Works** are carried out and shall carry them out or procure that they are carried out in accordance with the timescales specified in the **Construction Programme**. The **User** shall confirm to **The Company** or, where requested to do so by **The Company**, provide confirmation from the third party that the **Third Party Works** have been completed.
- 2.16.2 Given the nature of these works it may not be possible to fully identify the works required or the third parties they relate to at the date hereof. Where this is the case **The Company** shall, subject to 2.16.3 below, advise the **User** as soon as practicable and in any event by [ ] of the **Third Party Works** and shall be entitled to revise Appendix N and as a consequence the **Construction Programme** and Appendix R as necessary to reflect this.
- 2.16.3 Where **Third Party Works** are likely to be **Modifications** required to be made by another user(s) (“the **First User(s)**”) as a consequence of **Modifications** to the **GB Transmission System** to be undertaken by **The Company** under this **Construction Agreement** **The Company** shall as soon as practicable after the date hereof issue the notification to such **First User’s** in accordance with **CUSC** Paragraph 6.9.3.1. The **User** should note its obligations under **CUSC** Paragraph 6.10.3 in respect of the costs of any **Modifications** required by the **First User(s)**.
- 2.16.4 In the event that the **Third Party Works** have not been completed by the date specified in the **Construction Programme** or, in **The Company’s** reasonable opinion are unlikely to be completed by such date, **The Company** shall be entitled to revise the **Construction Programme** and Appendix R as necessary to reflect such delay and also, where **The Company** considers it necessary to do so, shall be entitled to revise the **Construction Works** (and as a consequence Appendices A and B to the **Bilateral Connection Agreement**). For the avoidance of doubt such revisions shall be at **The Company’s** absolute discretion and the consent of the **User** is not required. Further, in the event that the **Third Party Works** have not been completed by [ ] **The Company** shall have the right to terminate this **Construction Agreement** upon giving notice in writing to the **User** and in this event the provisions of Clause 11 of this **Construction Agreement** shall apply.
- 2.17 If at anytime prior to the **Completion Date** the **User** makes a **Modification Application** to reduce it’s **Local Capacity Nomination** and/or **Transmission Entry Capacity** then on acceptance by the **User** of the resulting **Modification Offer** the **User** shall forthwith be liable to pay to **The Company** the **Capacity**

**Reduction Charge** such payment to be made within 14 days of the date of **The Company's** invoice in respect thereof.

### 3. DELAYS

- 3.1 If either party shall have reason to believe that it is being delayed or will be delayed in carrying out that party's **Works** for any reason (whether it is one entitling it to the fixing of a new date under Clause 3.2 of this **Construction Agreement** or not) it shall forthwith notify the other party in writing of the circumstances giving rise to the delay and of the extent of the actual and/or anticipated delay.
- 3.2 If prior to the **Completion Date** a party (in this Clause 3.2 "the **Affected Party**") shall be delayed in carrying out any of the **Affected Party's Works** (including their commissioning) by reason of any act, default or omission on the part of the other Party (in this Clause the "**Defaulting Party**") or the **Defaulting Party's** employees, agents, contractors or sub-contractors or by reason of an event of **Force Majeure**, the **Affected Party** shall be entitled to have such later date or dates fixed as the **Commissioning Programme Commencement Date** and/or (as the case may be) the **Completion Date** as may be fair and reasonable in the circumstances provided that it shall have notified the **Defaulting Party** in writing of such act, default or omission or event of **Force Majeure** within 28 days of it becoming aware of the occurrence giving rise to the delay together with an estimate of the proposed delay which it will cause the **Affected Party**. In the event of a dispute between the parties over what is or are any fair and reasonable new date or dates to be fixed in the circumstances this shall be promptly referred to and determined by the **Independent Engineer**. Once the new date or dates are fixed the **Construction Programme** and/or **Commissioning Programme** shall be deemed automatically amended as appropriate and **The Company** shall be entitled to revise Appendix R as necessary to reflect this.

### 4. COMMISSIONING PROGRAMME AND LIQUIDATED DAMAGES

- 4.1 Each party shall give written notice to the other declaring its readiness to commence the **Commissioning Programme** when this is the case.
- 4.2 The **Commissioning Programme** shall commence forthwith once both parties have given written notice to the other under Clause 4.1.
- 4.3 The **Works** shall be deemed to have been **Commissioned** on the date that the **Independent Engineer** certifies in writing to that effect.
- 4.4 In the event that the actual date of commencement of the **Commissioning Programme** is later than the **Commissioning Programme Commencement Date** **The Company** (if and to the extent that it is responsible for delayed commissioning beyond the **Commissioning Programme Commencement Date**, such responsibility and/or its extent to be determined by the

**Independent Engineer** failing agreement between the parties) shall be liable to pay to the **User Liquidated Damages** for each day that the actual date of commencement of the **Commissioning Programme** is later than the **Commissioning Programme Commencement Date**. It is declared and agreed that such **Liquidated Damages** shall cease to be payable in respect of any period after the date of actual commencement of the **Commissioning Programme**.

- 4.5 In the event that the actual date on which the **Construction Works** are **Commissioned** is later than the **Completion Date The Company** (if and to the extent that it is responsible for delayed completion beyond the **Completion Date**, such responsibility and/or its extent to be determined by the **Independent Engineer** failing agreement between the parties) shall be liable to pay to the **User Liquidated Damages** for each day that the actual date on which the **Construction Works** are **Commissioned** is later than the **Completion Date**. It is hereby agreed and declared that such **Liquidated Damages** shall cease to be payable in respect of any period after completion of the **Construction Works**.
- 4.6 **Liquidated Damages** payable under Clauses 4.4 and 4.5 of this **Construction Agreement** shall accumulate on a daily basis but shall be payable calendar monthly. On or before the 15th day of each month the party entitled to receive the payment of **Liquidated Damages** shall send to the other party a statement of the **Liquidated Damages** which have accrued due in the previous calendar month. The party receiving such statement shall in the absence of manifest error pay the **Liquidated Damages** shown on the statement within 28 days of the date upon which the statement is received.
- 4.7 Without prejudice to and in addition to the obligation of the **User** pursuant to Clause 2.4 of this **Construction Agreement**, the payment or allowance of **Liquidated Damages** pursuant to this Clause 4 shall be in full satisfaction of **The Company's** liability for failure to perform its obligations by the **Commissioning Programme Commencement Date** and/or the **Completion Date** as appropriate.
- 4.8 In the event that the **User** shall have failed, in circumstances not entitling it to the fixing of a new date as the **Commissioning Programme Commencement Date** pursuant to Clause 3.2, to complete the **User's Works** by the **Backstop Date** to a stage where the **User** is ready to commence the **Commissioning Programme**, **The Company** shall have the right to terminate this **Construction Agreement** upon giving notice in writing to the **User**. Upon such termination the provisions of Clause 11 shall apply.

## 5. APPROVAL TO CONNECT/ENERGISE/BECOME OPERATIONAL

- 5.1 Not later than 4 months prior to the expected **Commissioning Programme Commencement Date** or by such other time as may be agreed between the parties the parties shall prepare and submit the **Operation Diagrams**

required to be prepared and submitted by each of them respectively under CC 7.4.7 and 7.4.10 and likewise the **Site Common Drawings** required under CC 7.5.2 and 7.5.4 and, if necessary, **Gas Zone Diagrams** referred to in CC 7.4.9 and 7.4.12.

- 5.2 Not later than 3 months prior to the expected **Commissioning Programme Commencement Date** or by such other time as may be agreed between the parties the parties shall prepare and submit the **Operation Diagrams** required to be prepared and submitted by each of them respectively under CC 7.4.8 and 7.4.11 and likewise the **Site Common Drawings** required under CC 7.5.3 and 7.5.5.
- 5.3 Not later than 3 months prior to the expected **Commissioning Programme Commencement Date** or by such other time as may be agreed between the parties:-
- 5.3.1 each party shall submit to the other data within its possession needed to enable the completion of Appendices F3 and F4 to the **Bilateral Connection Agreement**; and
- 5.3.2 the **User** shall submit to **The Company** evidence satisfactory to **The Company** that the **User's Equipment** complies or will on completion of the **User's Works** comply with Clause 8 of this **Construction Agreement** and Paragraphs [1.3.3(b), 2.9 and 6.7] of the **CUSC**.
- 5.4 Not later than 8 weeks prior to the expected **Commissioning Programme Commencement Date** or by such other time as may be agreed between the parties each party shall submit to the other:
- 5.4.1 for the **Connection Site** information to enable preparation of **Site Responsibility Schedules** complying with the provisions of Appendix 1 to the **Connection Conditions** together with a list of managers who have been duly authorised by the **User** to sign such **Site Responsibility Schedules** on the **User's** behalf;
- 5.4.2 written confirmation as required under CC.5.2.1(g) that the list of **Safety Co-ordinators** are authorised and competent [and a list of persons appointed pursuant to **Grid Code** CC5.2(m)];
- 5.4.3 a list of the telephone numbers for the facsimile machines referred to in CC6.5.9.
- 5.5 If directly connected to the **GB Transmission System** not later than 3 months prior to the expected **Commissioning Programme Commencement Date** each party shall submit to the other a statement of readiness to complete the **Commissioning Programme** in respect of the **Works** and the statement submitted by the **User** shall in addition contain relevant **Connected Planning Data** and a report certifying to **The Company** that, to the best of the information, knowledge and belief of the **User**, all relevant **Connection Conditions** applicable to the **User** have been considered and complied with.

If **The Company** considers that it is necessary, it will require this latter report to be prepared by the **Independent Engineer**. The report shall incorporate if requested by **The Company** type test reports and test certificates produced by the manufacturer showing that the **User's Equipment** meets the criteria specified in CC6.

**5.6** If embedded not later than 3 months prior to the **Charging Date** or by such other time as may be agreed between the **Parties** the **User** shall submit to **The Company** a statement of readiness to use the **GB Transmission System** together with **Connected Planning Data** and a report certifying to **The Company** that, to the best of the information, knowledge and belief of the **User**:-

- (i) all relevant **Connection Conditions** applicable to the **User** have been considered;
- (ii) CC 6 insofar as it is applicable to the **User** has been complied with; and
- (iii) the site-specific conditions set out in Appendices [F1, F3, F4] and [F5] to the **Bilateral Embedded Generation Agreement** have been complied with.

If **The Company** considers that it is necessary, it will require this report to be prepared by the **Independent Engineer**. The report shall incorporate if requested by **The Company** type test reports and test certificates produced by the manufacturer showing that the **User's Equipment** meets the criteria.

## **6. INDEPENDENT ENGINEER**

The parties agree and shall procure that the **Independent Engineer** shall act as an expert and not as an arbitrator and shall decide those matters referred or reserved to him under this **Construction Agreement** by reference to **Good Industry Practice** using his skill, experience and knowledge and with regard to such other matters as the **Independent Engineer** in his sole discretion considers appropriate. All references to the **Independent Engineer** shall be made in writing by either party with notice to the other being given contemporaneously as soon as reasonably practicable and in any event within 14 days of the occurrence of the dispute to be referred to the **Independent Engineer**. The parties shall promptly supply the **Independent Engineer** with such documents and information as he may request when considering such question. The **Independent Engineer** shall use his best endeavours to give his decision upon the question before him as soon as possible following its referral to him. The parties shall share equally the fees and expenses of the **Independent Engineer**. The parties expressly acknowledge that submission of disputes for resolution by the **Independent Engineer** does not preclude subsequent submission of disputes for resolution by arbitration as provided for in the **Dispute Resolution Procedure**. Pending

any such submission the parties shall treat the **Independent Engineer's** decision as final and binding.

## 7. BECOMING OPERATIONAL

- 7.1 If directly connected to the **GB Transmission System** **The Company** shall connect and **Energise** the **User's Equipment** at the **Connection Site** during the course of and in accordance with the **Commissioning Programme** and thereafter upon compliance by the **User** with the provisions of Clause 5 and provided (1) the **Construction Works** excluding the **Seven Year Statement Works** shall be **Commissioned** and (2) the **Seven Year Statement Works** and **Third Party Works** shall be completed **The Company** shall forthwith notify the **User** in writing that the **Connection Site** shall become **Operational** for the purposes of its **Local Capacity Nomination** [and **Transmission Entry Capacity**].
- 7.2 If **Embedded** upon compliance by the **User** with the provisions of Clauses 5.1, 5.2 and 5.3 and subject, if **The Company** so requires, to the **Transmission Reinforcement Works** [and/or works for the **Modification**] being carried out and/or the [New] **Connection Site** being **Operational** (any or all as appropriate) **The Company** shall forthwith notify the **User** ("**Operational Notification**") in writing that it has the right to use the **GB Transmission System** for the purposes of its **Local Capacity Nomination** [and **Transmission Entry Capacity**]. It is an express condition of this **Construction Agreement** that in no circumstances, will the **User** use or operate the **User's Equipment** without receiving the **Operational Notification** from **The Company**.
- 7.3 If, on completion of the **User's Works** in accordance with the terms of this **Construction Agreement** the **Registered Capacity** of the **User's Equipment** is less than [ ]MW, **The Company** shall automatically have the right to amend Clause 7 and Appendix C to the **Bilateral Connection Agreement** to reflect the actual **Registered Capacity** of the **User's Equipment**.
- 7.4 **Local Capacity Nomination and/or Transmission Entry Capacity Reduction**
- 7.4.1 If, at any time prior to the **Completion Date** **The Company** reasonably believes from data provided by the **User** to **The Company**, the reports provided by the **User** pursuant to Clause 2.8 and Clause 5 of this **Construction Agreement**, the commissioning process under the **Construction Agreement** or otherwise that the **User's Equipment** will be such that it will not be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination** and/or **Transmission Entry Capacity** **The Company** shall advise the **User** accordingly in writing setting out its reasons for this belief, the source of the information giving rise to the concern and seeking clarification from the **User**.

- 7.4.2 The **User** shall respond to **The Company** within 15 **Business Days** of the date of the **Preliminary Request** providing such information or data as is necessary to satisfy **The Company's** concerns set out in the **Preliminary Request** and making any amendments necessary to the report provided by the **User** pursuant to Clause 2.8 and / or data provided by the **User** to **The Company** to reflect this.
- 7.4.3 In the event that **The Company** is satisfied from the information provided in accordance with Clause 7.4.2 by the **User** that the **User's Equipment** will be such that it will be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination** and/or **Transmission Entry Capacity** **The Company** shall notify the **User** accordingly.
- 7.4.4 In the event that the **User** does not respond to the **Preliminary Request** or, notwithstanding the **User's** response, **The Company** remains of the view that the **User's Equipment** will be such that it will not reasonably be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination** and/or **Transmission Entry Capacity** **The Company** shall inform the **User** in writing that it intends to amend Clause 7 and Appendix C to the [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**] to reflect the **Local Capacity Nomination** and/or **Transmission Entry Capacity** that it reasonably believes to be the level of power that the **User's Equipment** will be capable of exporting .
- 7.4.5 The **User** shall respond to the **Notice of Intent** within 15 **Business Days** of the date of the **Notice of Intent** explaining why it still reasonably believes that its **User's Equipment** will be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination** and/or **Transmission Entry Capacity** or at more than the MW figure proposed by **The Company** in the **Notice of Intent** or providing a reasonable explanation as to why this is not the case.
- 7.4.6 In the event that **The Company** is satisfied from the information provided in accordance with Clause 7.4.5 by the **User** that the **User's Equipment** will be such that it will be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination** and/or **Transmission Entry Capacity** **The Company** shall notify the **User** accordingly.
- 7.4.7 Where notwithstanding the **User's** response to the **Notice of Intent** **The Company** remains of the view that the **User's Equipment** will be such that it will not reasonably be capable of exporting power onto the **GB Transmission System** at the level of the **Local Capacity Nomination** and/or **Transmission Entry Capacity** or at more than the MW figure proposed by **The Company** in the **Notice of Intent** or

the **User** does not provide a response that is satisfactory to **The Company** within the timescale specified in 7.4.5 above **The Company** will issue the **Notice of Reduction** to the **User** and will send a copy of the same to the **Authority**.

- 7.4.8 Unless during such period the matter has been referred by the **User** to the **Authority** for determination by the **Authority** under the provisions of Standard Condition C9 Paragraph 4 of the **Transmission Licence**, the **Notice of Reduction** shall take effect on the day 15 **Business Days** after the date of the **Notice of Reduction** and Appendix C of the [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**] shall be amended on that date in the manner set out in the **Notice of Reduction**. Where the matter has been referred the amendments to Appendix C of the [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**] and the date they take effect shall be as set out in the Authority's determination.
- 7.4.9 After a **Notice of Reduction** has taken effect **The Company** shall be entitled to make such amendments to this **Construction Agreement** as it requires as a result of the reduction in the **Local Capacity Nomination** and/or **Transmission Entry Capacity** effected by the **Notice of Reduction** and as a consequence to the [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**]. **The Company** shall advise the **User** as soon as practicable and in any event within 3 months of the date of the **Notice of Reduction** (or if the matter has been referred by the **User** to the **Authority** for determination, the date of determination) of such amendments by way of offer of an agreement to vary the **Construction Agreement** and [**Bilateral Connection Agreement**] [**Bilateral Embedded Generation Agreement**]. This agreement to vary will also provide for payment by the **User** of the **Reduction Fee** where applicable. The parties acknowledge that any dispute regarding this variation shall be referable to and determined by the **Authority** under the provisions of Standard Condition C9 Paragraph 4 of the **Transmission Licence**.
- 7.4.10 On the date that the **Notice of Reduction** takes effect the **User** shall be liable to pay to **The Company** the **Capacity Reduction Charge** such payment to be made within 14 days of the date of **The Company's** invoice therefor.

## 8. COMPLIANCE WITH SITE SPECIFIC TECHNICAL CONDITIONS

The **User** shall ensure that on the **Completion Date** the **User's Equipment** complies with the site specific technical conditions set out in Appendix F 1-5 to the **Bilateral Connection Agreement** .

## 9. SECURITY REQUIREMENTS and BC CANCELLATION CHARGE RECONCILIATION

### 9.1 Security

The **User** shall provide security to **The Company** in accordance with **CUSC** Schedule 4 in respect of the **User's** obligations to pay the **BC Cancellation Charge** to **The Company** on termination of this **Construction Agreement**.

### 9.2 BC Cancellation Charge Reconciliation

9.2.1 Within 60 days of the date of termination of this **Construction Agreement** **The Company** shall:

- (a) furnish **the User** with a statement showing its estimate of the **Actual BC Cancellation Charge Costs** and will provide as soon as practicable evidence of such costs having been incurred; and
- (b) by written notice to **the User** inform **the User** of all capital items which cost **The Company** in excess of £10,000 and in relation to which the **BC Cancellation Charge** shall have been paid and whether **The Company** (1) wishes to retain the said capital items or (2) dispose of them.

9.2.2 The cost of capital items (including without limitation the amount paid on account of the design, purchase, installation and testing of the said capital item and also associated construction works and interest charges) which **The Company** wishes to retain (other than those which have been, or are proposed to be installed as a replacement for **Transmission Plant** and **Transmission Apparatus**) **The Company** shall not be taken into account in assessing the **Actual BC Cancellation Charge Costs** provided that in the event that **The Company** wishes to retain any capital item which has been installed but wishes to remove it to storage or to another site then it shall only reimburse to the **User** the cost of the capital item and not the costs of such installation and shall deduct from any reimbursement due to the **User** the costs of removal and/or storage.

9.2.3 In respect of all capital items which **The Company** wishes to dispose (other than those which have been, or are proposed to be installed as a replacement for **Transmission Plant** and **Transmission Apparatus**) it shall forthwith (and subject to **The Company** obtaining the consent of the **Authority** under Standard Condition B3 of the **Transmission Licence** if required and/or subject to any **Relevant Transmission Licensee** obtaining the consent of the **Authority** under Standard Condition B3 of its transmission licence) sell or procure the sale of the said capital item on an arms-length basis as

soon as reasonably practicable. Forthwith upon receipt of the sale proceeds **The Company** shall pay to the **User** where it has paid a **BC Cancellation Charge** which, when taking into account such sale proceeds, exceeds the **Actual BC Cancellation Charge** payment in the proceeds received from any such sale together with interest thereon calculated on a daily basis from the date of termination to the date of payment at **Base Rate** for the time being and from time to time less any reasonable costs associated with the sale including the costs and expenses reasonably incurred and/or paid and/or which **The Company** is legally bound to pay on removing the capital item, any storage charges and any costs reasonably incurred by **The Company** in respect of reinstatement associated with removal of the capital item. **The Company** shall provide the **User** with reasonably sufficient evidence of all such costs and expenses having been incurred. If the **Authority** does not agree to the disposal of the capital item the capital item shall be retained by **The Company** and **The Company** shall reimburse the **User** the notional current market value in situ of the said capital item as between a willing buyer and a willing seller as agreed between the parties and failing agreement as determined by reference to arbitration in accordance with the **Dispute Resolution Procedure** together with interest thereon calculated on a daily basis from the date of termination of this **Construction Agreement** to the date of payment at **Base Rate** for the time being and from time to time.

- 9.2.4 As soon as reasonably practicable after termination of this **Construction Agreement** **The Company** shall provide the **User** with a statement of the **Actual BC Cancellation Charge** together with evidence of such costs having been incurred and/or paid and/or having been committed to be incurred.

If the **Actual BC Cancellation Charge Costs** are less than the payments made by the **User** in respect of the **BC Cancellation Charge** following termination of this **Construction Agreement** **The Company** shall forthwith pay to the **User** the excess paid together with interest on a daily basis at **Base Rate** for the time being and from time to time from the date of payment of the **BC Cancellation Charge** to the date of reimbursement by **The Company** of the said excess paid.

## 10. EVENT OF DEFAULT

Alternate provisions apply depending whether or not the **User** does (10A) or does not (10B) meet **The Company's** required credit rating on signing this **Construction Agreement**

### 10A. Event of Default

Any of the following events shall constitute an **Event of Default**:-

- 10A.1 If the **User** fails to provide or procure that there is provided to **The Company** within the requisite time any relevant security satisfactory to **The Company**, pursuant to this **Construction Agreement** and **CUSC** Schedule 4 Part Three.
- 10A.2 If having having provided security satisfactory to **The Company** pursuant to pursuant to this **Construction Agreement** and **CUSC** Schedule 4 Part Three.
- (a) The **User** thereafter fails to provide or procure that there is provided to **The Company** or at any time fails to maintain or procure that there is maintained in full force and effect the relevant security arrangement required by **CUSC** Schedule 4 Part Three or to revise or renew such security with the required replacement security or to maintain or procure that there is maintained in full force and effect any such renewed, revised or substituted security as so required, or if the User shall otherwise be in breach of any of its obligations in respect of security under to this **Construction Agreement** and **CUSC** Schedule 4 Part Three;
  - (b) The **User** or any shareholder (whether direct or indirect) of the **User** or any other party who may at any time be providing security to **The Company** pursuant to the requirements of this **Construction Agreement** and **CUSC** Schedule 4 Part Threetakes any action whether by way of proceedings or otherwise designed or calculated to prevent, restrict or interfere with the payment to **The Company** of any amount so secured whether or not there shall be a dispute between the parties;
  - (c) Any party who may at any time be providing security to **The Company** pursuant to the provisions of this **Construction Agreement** and **CUSC** Schedule 4 Part Threefails to pay to **The Company** any sum demanded pursuant thereto.
- 10A.3 If
- (i) There is a material adverse change in the financial condition of the **User** such as to give **The Company** reasonable grounds for concluding that there is a substantial probability that the **User** will default in the payment of any sums due or to become due to **The Company** within the next following period of twelve (12) months in terms of or on termination of this **Construction Agreement**; or
  - (ii) an event of default has occurred under any banking arrangements (as such may be more particularly described in the **Bilateral Connection Agreement**) (an event of default being any event described as such in the banking

arrangements)] put in place by the **User** in connection with a project for which security under this Clause 10A is required by **The Company** and as a result the banks who are party to such banking arrangement have taken steps to declare the principle of the advances under such arrangement immediately due and payable; or

- (iii) any other indebtedness of the **User** for the repayment of borrowed money (in a principal outstanding amount of not less than £1,000,000 pounds sterling or such greater amount specified in the **Bilateral Connection Agreement**) has become due and payable prior to the stated date of maturity thereof by reason of any default or breach on the part of the **User** and the amount in question has not been paid by the **User** or refinanced within a period of 28 days following the date upon which it was so declared due and payable

and in (i) or (ii) or (iii) the **User** fails, within a period of 7 (seven) days following the date on which **The Company** gives the **User** notice in writing of one or other of the above events occurring to provide **The Company** with such security as **The Company** shall require to cover the **User's** payment obligations to **The Company** arising in the event of or which have arisen prior to termination of this **Construction Agreement** and which arise under this **Construction Agreement**. The security to be provided shall be in a form satisfactory to **The Company** in accordance with this **Construction Agreement** and **CUSC** Schedule 4 Part Three.

Provided that (in relation to paragraphs (i) or (ii) or (iii) above) if at anytime after the putting in place of security under Clause 10A.3 the **User** shall produce to **The Company** evidence to **The Company's** reasonable satisfaction that there is not a substantial probability of the **User** not being able to make payment to **The Company** of such sums within the next following period of twelve (12) months, **The Company** shall not require the **User** to provide the aforesaid security and shall release any such security then in place. This waiver is without prejudice to **The Company's** right to require security at any time thereafter in the event of any of the circumstances set out in paragraph (i) and/or (ii), and/or (iii) subsequently occurring.

10A.4 Where any of the **Events of Default** in Paragraph 5.3.1 of the **CUSC** have occurred and are occurring it shall be an **Event of Default** for the purposes of Clause 11 of this **Construction Agreement**.

## 10B **Event of Default**

### 10B.1 If

- (i) an event of default has occurred under any banking arrangements (as such may be more particularly described in the **Bilateral Connection Agreement**) (an event of default

being any event described as such in the banking arrangements) put in place by the **User** in connection with a project for which security under this Clause 10B is required by **The Company** and as a result the banks who are party to such banking arrangement have taken steps to declare the principle of the advances under such arrangement immediately due and payable; or

- (ii) there is a material adverse change in the financial condition of the **User** such as to give **The Company** reasonable grounds for concluding that there is a substantial probability that the **User** will default in the payment of any unsecured sum due or to become due to **The Company** within the next following period of 12 (twelve) months in terms of or on termination of this **Construction Agreement**;
- (iii) any other indebtedness of the **User** for the repayment of borrowed money (in a principal amount of not less than £1,000,000 pounds sterling or such greater amount specified in the **Bilateral Connection Agreement**) has become due and payable prior to the stated date of maturity thereof by reason of any default or breach on the part of the **User** and the amount in question has not been paid by the **User** or refinanced within a period of 28 days following the date upon which it was so declared due and payable

and in either (i) or (ii) or (iii) the **User** fails:-

- (1) within a period of 14 (fourteen) days following the date on which **The Company** gives notice of such circumstances to provide to **The Company** a cash deposit in a **Bank Account**, a **Performance Bond** or **Letter of Credit** in favour of **The Company** and **Valid** at least up to the last day of the **Financial Year** in which the event occurs for such amount representing **The Company's** reasonable estimate of all unsecured sums to become due to **The Company** in the period up to the end of the **Financial Year** in which the event occurs such sum to be specified in the said notice; or
- (2) to subsequently provide such cash deposit or renew such **Performance Bond** or **Letter of Credit** (or such renewed **Performance Bond** or **Letter of Credit** provided under this paragraph) not less than 45 days prior to its stated expiry date for such amount representing **The Company's** reasonable estimate of the unsecured sums to become due to **The Company** in the next following **Financial Year** valid at least up to the last day of the next following **Financial Year** and to continue the provision of cash deposit a **Performance Bond** or

**Letter of Credit** in a similar manner, to such estimate of unsecured sums.

Provided that regarding (i) or (ii) or (iii) if at any time after the putting in place of security under this Clause 10B.1 the **User** shall provide to **The Company** evidence to **The Company's** reasonable satisfaction that there is not a substantial probability of the **User** being unable to make payment to **The Company** of any unsecured sums within the next following period of twelve (12) months, **The Company** shall not require the **User** to provide the aforesaid security and shall release any such security then in place. This waiver is without prejudice to **The Company's** right to return security at any time thereafter in the event of any of the circumstances set out in paragraph (i) and/or (ii) and/or (iii) in this Clause 10B.1 subsequently occurring.

- 10B.2 If the **User** fails to provide or procure that there is provided to **The Company** or at any time fails to maintain or procure that there is maintained in full force and effect the relevant security arrangement required under this **Construction Agreement** and **CUSC** Schedule 4 Part Three or to renew or revise such security or to substitute any security with the required replacement security or to maintain or procure that there is maintained in full force and effect any such renewed, revised or substituted security as so required or if the **User** is otherwise in breach of any of its obligations under this **Construction Agreement** and **CUSC** Schedule 4 Part Three.
- 10B.3 If the **User** or any shareholder (whether direct or indirect) of the **User** takes any action whether by way of proceedings or otherwise designed or calculated to prevent restrict or interfere with the payment to **The Company** of any amount so secured or seeks or permits or assists others to do so, whether or not there shall be a dispute between the parties.
- 10B.4 If any party who may at any time be providing or holding security in favour of **The Company** in respect of this **Construction Agreement** pursuant to this **Construction Agreement** and **CUSC** Schedule 4 Part Three fails to pay **The Company** any sum demanded in any **Notice of Drawing** pursuant thereto.
- 10B.5 Where any of the **Events of Default** in Paragraph 5.3.1 of the **CUSC** have occurred and are occurring it shall be an **Event of Default** for the purposes of Clause 11 of this **Construction Agreement**.

## 11. TERMINATION ON EVENT OF DEFAULT

- 11.1 Once an **Event of Default** pursuant to Clause 10 has occurred and is continuing **The Company** may give notice of termination to the **User** whereupon this **Construction Agreement** shall forthwith terminate and the provisions of this Clause 11 shall apply.

11.2 On termination of this **Construction Agreement** **The Company** shall disconnect all the **User's Equipment** at the **Connection Site** and:

- (a) the **User** shall remove any of the **User's Equipment** on, in relation to **Connection Sites** in England and Wales, **The Company's** or, in relation to **Connection Sites** in Scotland, **Relevant Transmission Licensee's** land within 6 months of the date of termination or such longer period as may be agreed between **The Company** or the **Relevant Transmission Licensee** (as appropriate) and the **User**; and
- (b) in the case of **Connection Sites** in England and Wales, **The Company** shall remove and, in the case of **Connection Sites** in Scotland, **The Company** shall procure that the **Relevant Transmission Licensee** removes, any **Transmission Connection Assets** on the **User's** land within 6 months of the date of termination or such longer period as may be agreed between **The Company** or the **Relevant Transmission Licensee** (as appropriate) and the **User**.

11.3 The **User** shall where this **Construction Agreement** terminates prior to the **[Charging] [Completion]Date** be liable forthwith on the date this **Construction Agreement** so terminates to pay to **The Company**:-

- (1) the **BC Cancellation Charge**,

such payment to be made within 14 days of the date of **The Company's** invoice in respect thereof and subject to adjustment in accordance with Clause 9.2.

## 12. TERM

12.1 Subject to the provisions for earlier termination set out in the **CUSC** this **Construction Agreement** shall continue until terminated in accordance with Clause 2.5, 2.6, 4.8 or 11 hereof.

12.2 In addition this **Construction Agreement** shall terminate upon termination of the associated **Bilateral Connection Agreement** and in the event that this is prior to the **Charging Date** the **User** shall in addition to the amounts for which it is liable under Clause 2.4 hereof be liable to pay to **The Company Final Sums** and the provisions of Clause 11 shall apply.

12.3 The associated **[Bilateral Connection Agreements or Agreement to Vary the Bilateral Connection Agreement]** will automatically terminate upon termination of this **Construction Agreement** prior to the **Charging Date**.

12.4 Any provisions for payment shall survive termination of this **Construction Agreement**.

### 13. CUSC

The provisions of Sections 6.6 (Payment), 6.14 (Transfer and Subcontracting), 6.15 (Confidentiality), 6.18 (Intellectual Property), 6.19 (Force Majeure), 6.20 (Waiver), 6.21 (Notices), 6.22 (Third party Rights), 6.23 (Jurisdiction), 6.24 (Counterparts), 6.25 (Governing Law), 6.26 (Severance of Terms), 6.27 (Language) inclusive of the **CUSC** shall apply to this **Construction Agreement** as if set out in this **Construction Agreement**.

### 14. DISPUTES

Except as specifically provided for in this **Construction Agreement** any dispute arising under the terms of this **Construction Agreement** shall be referred to arbitration in accordance with the **Dispute Resolution Procedure**.

### 15. VARIATIONS

15.1 Subject to Clause 15.2 and 15.3 below, no variation to this **Construction Agreement** shall be effective unless made in writing and signed by or on behalf of both **The Company** and the **User**.

15.2 **The Company** and the **User** shall effect any amendment required to be made to this **Construction 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.

15.3 **The Company** has the right to vary Appendices in accordance with Clauses 2.3, 2.11 and 7.4 and Paragraph 6.9 of the **CUSC**.

**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] )

CUSC v1.5

**APPENDIX [J]**  
**CONSTRUCTION PROGRAMME**

CUSC v1.5

## **APPENDIX [H]**

### **TRANSMISSION REINFORCEMENT WORKS**

**Part 1 LCN Transmission Reinforcement Works**

**Part 2 TEC Transmission Reinforcement Works**

**APPENDIX [L]**

**INDEPENDENT ENGINEER**

Company:

Connection site:

Type:

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The Independent Engineer will be a Member of the Association of Consulting Engineers (ACE) and shall be agreed between the parties within 120 days of execution of this Construction Agreement or such other period as may be agreed between the parties. Failing agreement it shall be referred to the President of the Institution of Electrical Engineers who shall nominate the Independent Engineer.

**APPENDIX [K]**

**LIQUIDATED DAMAGES**

Company:

Connection site:

Type:

---

The amount of Liquidated Damages payable by The Company to the User pursuant to this Construction Agreement shall be:

Liquidated Damages under Clause [4] of this Construction Agreement shall be calculated on a daily basis at a rate of £XXXXXX per week subject to the limit that the total Liquidated Damages payable by The Company to the User under this Clause shall not exceed £XXXXXX.

CUSC v1.5

**APPENDIX [G]**  
**TRANSMISSION CONNECTION ASSET WORKS**

CUSC v1.5

**APPENDIX [B]  
[Part 1]  
ONE OFF WORKS**

CUSC v1.5

1.

**APPENDIX [N]**  
**THIRD PARTY WORKS**

CUSC v1.5

**END OF SCHEDULE 2 EXHIBIT 3**

## **Part C - Text to give effect to WGAA3 – WGAA7**

## CHANGES FOR CAP 165 WGAA3, 4, 5, 6 and 7

The changes are as text for WGAA1 except as follows:

<b>WGAA3</b>	as WGAA1 pre completion date except
<b>Section 3, Appendix 3</b>	
Paragraph 1.4.1	replace reference to "5 Business Days..Year" with "4 <b>Financial Years</b> notice (such notice only to be effective from and not before the relevant Completion Date) prior to the 1 April on which it wishes the <b>LCN</b> decrease to take effect; "
Paragraph 1.4.3	Delete and replace "The decrease in the LCN shall take effect at the end of the LCN Decrease Notice Period or earlier, subject to payment by the User of the Use of System Charges payable during the LCN Decrease Notice Period if the User requires.
Paragraph 2.1	Delete reference to TEC Period
Paragraph 2.2.1	Delete reference to TEC Period and replace reference to "5 Business Days..Year" with "4 <b>Financial Years</b> notice (such notice only to be effective from and not before the relevant Completion Date) prior to the 1 April on which it wishes the <b>TEC</b> decrease to take effect;
Paragraph 2.2.1	Delete and replace "The decrease in the TEC shall take effect at the end of the TEC Decrease Notice Period or earlier, subject to payment by the User of the Use of System Charges payable during the TEC Decrease Notice Period if the User requires.
Clause 2.2.4	Shall be deleted.
Clause 2.4.6	Reference to TEC Period shall be deleted.
<b>CUSC Section 5</b>	
Para 5	Delete references to TEC period
Par 5.6	Paragraph 5.6 (Notice to Disconnect) shall be deleted and replaced as follows:  "Without prejudice to Paragraph 5.2.2, each User shall, as between The Company and the User, give to The Company not less than four Financial Years written notice (such notice only to be effective from and not before the relevant Completion Date) of any intention of the User to disconnect the User's Equipment. Such notice can not be given only be e
<b>Section 10</b>	Shall apply as attached (deletes ref to TEC Period) and provides for agreed notice period
<b>Section 11</b>	the definition of TEC Period shall be deleted.

## Appendix 4

In the case of generators in a negative charging zone, the User Commitment Amount will be calculated as WWAA1 but by ref to £1, £2 or £3 pounds in the same way as for generators not in a negative charging zone and for the BC Cancellation Amount rather than zero it will be calculated at £3 Reference to Capacity Reduction Charge on or after the Completion Date (Part 2 Para 1.4 and 1.5) shall be deleted

Reference to AC Cancellation Charge (Part 1 Para 3) shall mean  
“the Transmission Network use of System Charges payable up to the end of the Financial Year which is four years after the Financial Year in which such termination takes effect.

Sch 2 Exh 1 (BCA)

Delete clause 5.2 and reference to TEC Period in Clause 7 and in Appendix C

Sch 2 Exh 2 (BEGA)

Delete clause 5.2 and reference to TEC Period in Clause 7 and in Appendix C

Exh B and D

Delete ref to TEC Period

**WGAA4**

As WGAA3 except  
Reference is to “15 months” rather than “4 Financial Years”  
Sec10 (transition) is as attached but without reference to “Default Notice Period”

**WGAA5**

As WGAA2 up to Completion Date except that level of security for the Cancellation Charge is based on 100% of Cancellation Charge at Completion Date -4, 75% at Completion Date- 3, 50% at Completion Date – 2 and 25% at Completion Date –  
Edit to Clause 9 of Construction Agreement to show security is for these periods by reference to these % of the BC Cancellation Charge  
As WGAA3 after the Completion Date

**WGAA6**

As WGAA3 except  
Reference is to “2” rather than “4 Financial Years”  
Sec 10 Transition is as WGAA1

**WGAA7**

As WGAA3 except Sch 4 Part One is amended so that the User Commitment Amount is not triggered until 7 years from the Completion Date

**CUSC - SECTION 10**

**TRANSITION ISSUES**

**Not used, removed on 15<sup>th</sup> February 2007, dedicated to Transitional Issues** |

**CONTENTS**

[Part 1 **Not Used**

Part 3 **Not Used**

Part 3 **CUSC AMENDMENT PROPOSAL 165**

## Part 3

### 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 165** (Finite Long Term Entry Rights) which introduces the concept of a **Local Capacity Nomination** which forms the basis of a **User's** right to **Use of System** and provides for **Transmission Entry Capacity** to be temporally defined.

10.1.2 The **Access Amendment Proposal** affects **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:

- (a) the term "**Access Amendment Proposal**", shall mean **CUSC Amendment Proposal 165** (Finite Long Term Entry Rights);
- (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 "**Agreed Notice Period**", shall mean a **Notice Period** which is lower than the **Default Notice Period** and which has been agreed by **The Company** and the **User**;
- (d) 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**;
- (e) the term "**Application and Offer Amendments**", shall mean those amendments to **CUSC** Exhibits B, C, D and E proposed by the **Access Amendment Proposal**;
- (f) 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 the new Exhibit 3 (Construction Agreement) proposed by the **Access Amendment Proposal**;

- (g) 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**;
- (h) the term “**Default Notice Period**” means, the notice period required from the **LCN Implementation Date** for notice of decrease of **TEC** or **LCN** pursuant to **CUSC Section 3, Appendix 3 Paragraphs 1 and 2** or notice of **Disconnection** pursuant to **CUSC Section 5 Paragraph 5.6**;
- (i) 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**;
- (j) the term “**Existing Final Sums/User Commitment Arrangements**” shall mean the existing provisions for payment on termination as set out in a **New CUSC Agreement**;
- (k) the term “**LCN Implementation Date**” shall mean the **Implementation Date** for the **Access Amendment Proposal** (unless it is provided to be different in relation to a particular provision),
- (l) 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;
- (m) 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**;

- (n) the term “**Outstanding Applications**”, shall mean an offer yet to be made 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** at the **Relevant Date** but where the application was made prior to the **Relevant Date**;
- (o) 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
- (p) the term “**Relevant Date**” means the day on which the **Access Amendment Proposal** 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:

- (a) 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
- (b) where it wants the notice period to be for a lower number of **Financial Years** than the **Default Notice Period**; 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 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**;
- (d) the **Local Capacity Nomination** is the **Default LCN** or **Agreed LCN** as appropriate; and
- (e) the notice period is the **Default Notice Period** or **Agreed Notice Period** 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**:

- (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/or
- (c) those **New CUSC Agreements**; where it wants to continue on the **Existing Final Sums/User Commitment Arrangements**; 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 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; and;
- (e) the relevant Clauses and Appendices within the **Construction Agreement** are amended in the manner provided for (and in the case of the existing **Construction Agreement**, so that it is consistent with the new Exhibit) 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 it requires and 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 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**.

#### ***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 **Offers** in a form and manner consistent with the **Application and Offer Amendments** and **Bilateral Agreement Amendments**.

END OF SECTION 10