



AMENDMENT REPORT VOLUME 1

CUSC Amendment Proposal CAP 164

Connect and Manage

The purpose of this report is to assist the Authority in their decision of whether to implement Amendment Proposal CAP164

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1.0 SUMMARY AND RECOMMENDATIONS

Executive Summary

- 1.1 CAP164 was proposed by National Grid and submitted to the Amendments Panel for their consideration on 25th April 2008. Along with CAP164 National Grid raised a number of other access related amendments.
- 1.2 CAP164 seeks to provide any generator who wishes to connect to the transmission system with a fixed date for receiving Transmission Entry Capacity ("TEC"). This date, the 'TEC effective date', must be the later of the completion of "local" transmission works or an agreed fixed lead time. The lead time for connection was not specified in the original proposal, the Working Group agreed it as 4 years.
- 1.3 A request for a TEC Effective date under (CAP164) Connect and Manage is optional. The TEC effective date can only be changed through a Modification Application; and if both the Generator and National Grid agree, and other CUSC parties are not unduly affected.
- 1.4 The provision of "local" works will be subject to 'force majeure' provisions as currently defined in the CUSC. The definition of "local" works was left to the Working Group to consider and agree i.e. how 'deep' and what the consequences of such a definition would be.
- 1.5 Although not part of the CUSC, it is proposed, under CAP164, that TEC granted with a TEC effective date be charged on the same principle as existing TEC, which is long-term incremental investment based (including any changes to local charging arrangements).
- 1.6 There is a symmetrical obligation on the generator associated with the guarantee of a TEC effective date. This requires the generator to pay TNUoS charges for a minimum period irrespective of the readiness of the generator to physically connect. This is intended to encourage the generator to apply only when consents have been granted; i.e. for the purposes of liability to pay TNUoS, force majeure excludes planning permission for the generating station.
- 1.7 The Working Group have carried out a cost benefit analysis on the additional cost Connect and Manage would impose on the operation of the system and the carbon benefit derived from Connect and Manage. This analysis alone suggests that there is no net benefit. The Working Group have also qualitatively discussed a number of other implications, although have not included them as part of a quantitatively assessment.
- 1.8 A request for an alternative from the Working Group consultation has been developed into a Working Group Alternative Amendment (WGAA) proposal by a sub group. This was subsequently adopted by the Working Group as a WGAA. The WGAA provides connection prior to wider works being completed. From the date of connection the Generator can generate up to the agreed capacity, ITEC. The suggested consequential change to charging arrangements is that a new tariff is developed and applied for the period between connection and a further fixed date (the forecast date for completion of wider works not a fixed lead time), the ITEC charge. The ITEC tariff would be set ex ante (in the offer) to reflect the forecast increase in operational costs. Prior to the fixed date the connectee would not pay wider TNUoS,

following the fixed date the connectee would stop paying the new charge and revert to wider TNUoS charging. From connection the connectee would also pay local charges and contribute to the residual.

Working Group Recommendation

- 1.9 The Working Group believes its Terms of Reference have been completed and CAP164 has been fully considered. At the final meeting on 18 November 2008 fifteen Working Group members cast votes:

Voting Results	For	Against	Abstain
Original better than Baseline	6	9	0
WGAA better than Baseline	15	0	0

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

Voting Results	For
Original best	3
WGAA best	12

Amendments Panels Recommendation

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

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

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

Voting Results	For
Original best	0
WGAA best	8

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

National Grid Recommendation

- 1.14 National Grid does not support the Original amendment on the basis that it has not been shown to be justified under the analysis on carbon costs, irrespective of our view that the costs presented for the early years that we

have indicated, in our view, are too low. We also note the other work presented in this area related to CAP148, namely the analysis in CAP 148 report, the Ofgem Impact Assessment and the CEPA analysis. Whilst we note the guidance on assessments with respect to carbon, we are unclear that this extends to limiting changes to the charging methodologies which could otherwise be considered as cost reflective and facilitating competition. In order to pursue the suggested charging arrangements for the Original proposal National Grid would seek explicit assurance that this would not be in breach of the transmission licence objectives, although we would regard the Authorities acceptance of the Original as implicit assurance.

- 1.15 In principle National Grid supports the WGAA on the basis that it better facilitates early connection with a forecast cost reflective charge, promoting effective competition; and facilitating more effective use of the GB transmission system efficiently discharging of the licensees obligations imposed under the Act. We recognise that the WGAA has a number of significant implications for the charging methodologies and a number of implications on revenue flows that will need to be considered before the Authority can make a decision. Furthermore we recognise that a similar possibly mutually exclusive WGAA is being developed under CAP166.

2.0 PURPOSE AND INTRODUCTION

- 2.1 This Amendment Report has been prepared by National Grid under the rules and procedures specified in the CUSC as designated by the Secretary of State.
- 2.2 Further to the submission of Amendment Proposal CAP164 and the subsequent wider industry consultation that was undertaken by National Grid, this document is addressed and furnished to the Gas and Electricity Markets Authority (“the Authority”) in order to assist them in their decision whether to implement Amendment Proposal CAP164.
- 2.3 CAP164 was proposed by National Grid and submitted to the Amendments Panel for their consideration on 25th April 2008. CAP164 Working Group Report was submitted to the CUSC Amendments Panel meeting on 21 November 2008. Following evaluation and consultation by the Working Groups, the Amendments Panel determined that CAP164 was appropriate to proceed to wider industry consultation by National Grid.
- 2.4 This document outlines the nature of the CUSC changes that are proposed. It incorporates National Grid’s recommendations to the Authority concerning the Amendment. Copies of all representations received in response to the consultation have been included in Volume 2 of this report.
- 2.5 This Amendment Report has been prepared in accordance with the terms of the CUSC. An electronic copy can be found on the National Grid Website, www.nationalgrid.com/uk/Electricity/Codes/.

3.0 PROPOSED AMENDMENT

- 3.1 The full text of the CAP164 amendment as originally proposed is set out in Annex 4. This Section summarises the original text of the proposed Amendment. The definition of this “Original” amendment has been developed by the Working Group and these discussions are summarised in Section 4, as well as discussions on potential Working Group Alternative Amendments.
- 3.2 CAP164 seeks to provide any generator who wishes to connect to the transmission system with a fixed date for receiving Transmission Entry Capacity (“TEC”). This date, the ‘TEC effective date’, must be the later of the completion of “local” transmission works or an agreed fixed lead time. The fixed lead time will be discussed and agreed in the amendment assessment stage and codified in the CUSC. Initial options proposed in the CAP164 Original were 3 years (aligns with planning restrictions in Scotland); or 4 years (more consistent with historic performance of providing reinforcements).
- 3.3 The Original proposal is silent on whether the fixed lead time is from the date of connection application or signature of the connection offer. The proposer clarified, to the Working Group that the intention was that it be from the acceptance of the connection offer.
- 3.4 A request for a TEC Effective date under (CAP164) Connect and Manage is optional. The TEC effective date can only be changed through a Modification Application; and if both the generator and National Grid agree, and other CUSC parties are not unduly affected.
- 3.5 The provision of “local” works will be subject to ‘force majeure’ provisions as currently defined in the CUSC. The definition of “local” works was left to the Working Group to consider and agree i.e. how ‘deep’ and what the consequences of such a definition would be.
- 3.6 Although not part of the CUSC, it is proposed, under CAP164, that TEC granted with a TEC effective date be charged on the same principle as existing TEC, which is long-term incremental investment based (including any changes to local charging arrangements).
- 3.7 There is a symmetrical obligation on the generator associated with the guarantee of a TEC effective date. This requires the generator to pay TNUoS charges for a minimum period irrespective of the readiness of the generator to physically connect (to the transmission system). The minimum period, will be agreed, by the Working Group, in the assessment of the proposal, to ensure equitable risk between other Users and the connectee. This is intended to encourage the generator to apply only when consents have been granted; i.e. for the purposes of liability to pay TNUoS, force majeure excludes planning permission for the generating station.
- 3.8 The Amendments Panel determined that the proposal should be considered by Working Groups 1 and 3 and that the Working Groups should report back to the Amendments Panel meeting within 3 months. In all respects, Working Group 1 acted as the CAP164 Working Group (‘the Working Group’). Working Group 3 is constituted as sub-group to Working Group 1, voting and

consultation on CAP161 was undertaken by Working Group 1¹. The Amendments Panel and Ofgem subsequently agreed a further 2 month extension to these timescales in light of the approval of CAP160, which includes the requirement for the Working Group to consult on proposals.

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

4.0 SUMMARY OF WORKING GROUP DISCUSSIONS

- 4.1 The Working Group acknowledged that CAP 164 was very similar in form to a previous Amendment proposal CAP 148 “Deemed access rights to the GB transmission system for renewable generation” with the fundamental difference being that CAP 164 places no technology-specific restrictions on the eligibility of a generator for a Connect and Manage connection offer i.e. CAP164 is applicable to all generators, not just renewable energy generators.
- 4.2 The Working Group made use of material available to it from the CAP 148 Working Group, as well as material associated with Ofgem’s Impact Assessment for CAP 148 published in July 2008 during the Working Group’s deliberations. Ofgem has not yet made a decision on CAP148.

Eligibility to apply

- 4.3 CAP164 should place no restrictions on the rights of a generator or potential generator to apply for TEC; i.e. it is open to all CUSC parties to apply.
- 4.4 The Working Group also agreed that CAP164 should not be mandatory, i.e. when making a Connection Application, a User would choose whether the offer included a fixed wider works lead time. The reason why a party might prefer a “conventional” rather than a “connect and manage” offer is that the former may have a lower level of financial commitment so may be appropriate to ask for further in advance than would be the case for a “connect and manage” offer. One may prefer to apply further in advance in cases where for example there is expected to be a long lead time for the local transmission works.
- 4.5 The Working Group discussed the interaction of CAP164 offers with existing offers and agreed that in making a CAP 64 offer, there should be no adverse effect on the connection date of other offers (made under CAP164 or the existing CUSC process). It noted the potential for there to be stronger pressure on Transmission Licensees to complete works for CAP 164 projects, but assumed that Transmission Licensees would exhibit no bias in their treatment of different applicants and progression of their works under their Licence obligations.

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

- 4.6 Once made, all CAP164 offers would form part of the contracted background for subsequent offers.
- 4.7 Existing contracted parties may switch to CAP164 arrangements following a CAP164 application.
- 4.8 Given the associated liability to pay TNUoS, it was considered that a prospective generator is only likely to choose to apply for transmission access under CAP164 when it had received planning consents. However, this was a commercial decision and did not need to be a condition of application. Under certain circumstances a generator may choose to apply for a connection prior to consents being granted, for example, if consents could not be granted without consideration of local transmission works, or local works were expected to be the critical path for the project. If this were the case, a generator may choose to apply under existing arrangements to avoid the additional TNUoS liability.
- 4.9 The Working Group noted that CAP 164 would benefit from co-ordination between the consents required for the generation project and its local transmission works. However it was noted that better coordination was a general point with or without CAP164.
- 4.10 The Working Group noted that a User could submit a Modification Application for a fixed date under the CAP164 arrangements, where the User wished to move over from an existing (pre CAP164) offer to a CAP164 offer. This may be an option for Users who wish to bring forward their connection date having received planning permission for their project. It was envisaged that this is how existing Users would move over to the CAP164 arrangements.

Eligibility of TEC to be granted – completion of local works

- 4.11 Under CAP164 TEC should be granted on the TEC Effective Date, subject to completion of Local Construction Works, (“LCW”). In considering how LCW might be defined the Working Group considered the definition, of LCW, developed under CAP 148, namely:

‘The works associated with the installation or upgrading of the network identified in the Construction Agreement and without which the generator would be unable to export the value of TEC (having disregarded any flows on the system caused by other generation users)’.

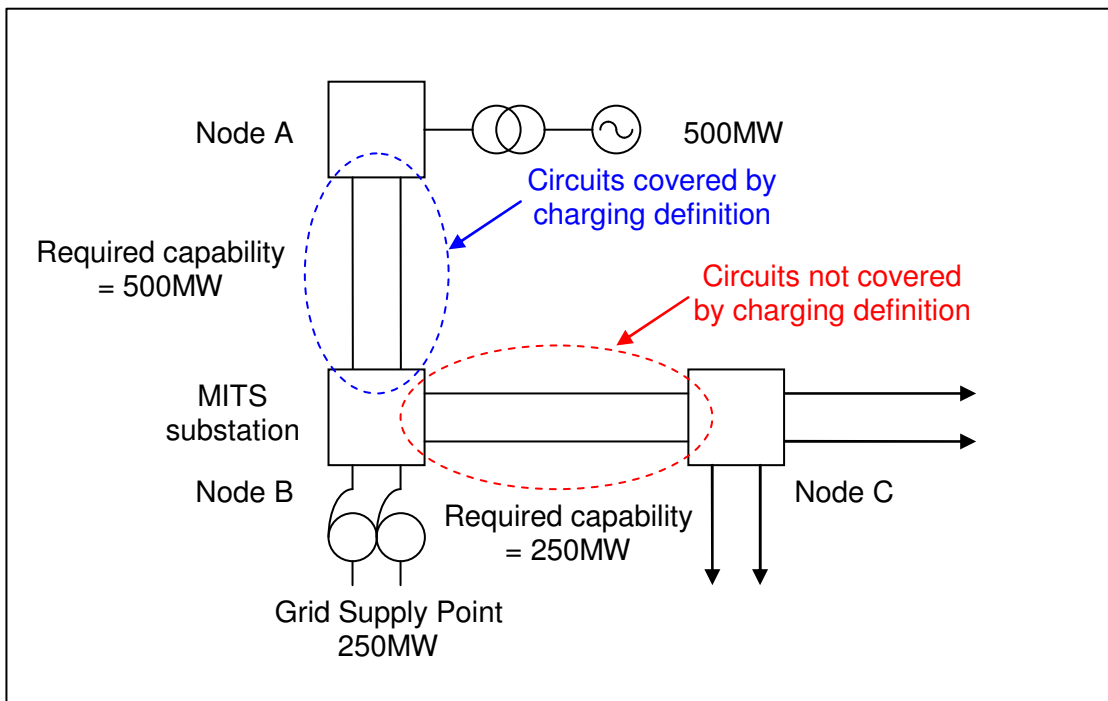
- 4.12 There was concern expressed in the Working Group that this definition may be problematic in circumstances in which the transmission constraint boundary capability interacts with the output from connected generation (e.g. where generation on the importing side of a transmission boundary is required to balance flows such that without this generation, the capability of the boundary is reduced). In these circumstances, the LCW definition above may lead to more LCW being identified than is necessary to accommodate the new generator.

- 4.13 Therefore, a suggested revised definition of LCW was proposed:

‘The works associated with the installation or upgrading of the transmission network identified in the Construction Agreement and without which the generator would be unable to export the value of TEC (having disregarded flows on the system caused by other generators, other than assuming that

National Grid can optimise the amount of LCW with the use of balancing generation, at zero cost).¹

- 4.14 The Working Group acknowledged that these definitions differ from the “local generation charging” proposals contained in National Grid’s GB ECM-11 Conclusions Report², which have been developed alongside the other Transmission Access Review related CAPs on short- and long-term access products in Working Group 3.
- 4.15 In the charging conclusions report, local circuits are defined as 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 circuits connected. The diagram below shows an example of where the CAP 164 definition of LCW could be deeper than the charging definition of local works.



- 4.16 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 generator would only get transmission access once these circuits had been reinforced to provide a secure capability of 500MW. 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 new generator unless these circuits were reinforced to provide a secure capability of at least 250MW.
- 4.17 Working Group 3 noted that an LCW definition which disregards the output from other generators risks there being a permanent output restriction on the generator being connected. This is exemplified by multiple CAP 164 connections to the same local works where each is being disregarded to accommodate the other.

² http://www.nationalgrid.com/NR/rdonlyres/27F920CA-C678-4D91-A3D1-701E909BDAFB/28281/GBECM11ConcReport_final_HR.pdf

- 4.18 An alternative approach would be to re-define LCW such that it:
- Avoids circumstances in which there would be a permanent output restriction on the generator being connected,
 - Protects the individual generator from the actions of others or the decisions of the Transmission Owner or GBSO.
- 4.19 In any event, the Working Group has not fully explored the consequences of two separate definitions of local works – one definition for LCW under CAP 164 and another for charging purposes. However, Working Group 3 noted that current charging arrangements for charging are not consistent with the incremental works required to accommodate particular generators, nor their nodal transmission access rights. This is because all generators pay the zonal Long-Run Marginal Cost (“LRMC”) derived from a common charging methodology, namely the Investment Cost Related Pricing (“ICRP”) transport and tariff model).
- 4.20 Also as part of the Working Group 3 discussions on charging for local assets, the prospect of shared local assets was raised and discussed. The GB ECM-11 conclusions definition of local works retains some shared or sharable assets in the definition for some groups of generators. This is most clearly demonstrated for connections in northern Scotland where long sections of shared 132kV transmission assets are classed as local. New transmission connections would similarly be likely to share local connection assets. This has implications for the CAP 164 definition of LCW, namely if a local connection is shared, it would be designed to take the nominated shared capacity rather than the full output of each generator which is normally associated with TEC bookings.
- 4.21 The implication is that the CAP 164 definition of LCW would need to reflect the new concept developed in Working Group 3 of bookings for shared local capacity. For the avoidance of doubt, this means that a CAP 164 generator would have its output restricted under a shared local connection, but that this would be the subject of negotiation between it and the other generators sharing the connection.
- 4.22 It was agreed that a definition based on the charging description of a MITS substation should be adopted. Interpreting this into a definition of works rather than a boundary leads to:

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

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

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

Setting of TEC Effective date

- 4.23 Under CAP164 the TEC Effective Date should be the later of:

- The date requested by the generator in their application
- X years from the acceptance of the connection offer
- Completion of LCWs

An earlier TEC Effective Date could be possible by agreement of both the Generator and System Operator (SO). Where additional costs are incurred to provide earlier connection these should be borne solely by the connectee, e.g. additional operational costs etc.

- 4.24 The Working Group discussed the value of X (years). Some members of the Working Group believe that the value of X should be set such that it meets Government policy and Ofgem objectives to provide timely connections. For example, the TAR conclusions report states that *“new generation projects should be offered firm connection dates, reasonably consistent with the development time of their project.”*
- 4.25 The Energy White Paper states that the Government’s *“aim is to connect new renewable generating capacity to the electricity network as quickly and as cost-effectively as possible.”*
- 4.26 The words *“reasonably consistent”* and *“cost effective”* leave room for interpretation and hence members of the Working Group have suggested approaches for deriving a value of X (years) based on quantifiable objective criteria. Other Working Group members noted that the group was limited to only considering whether an Amendment proposal (or Alternative) better met the CUSC Applicable Objectives.
- 4.27 A number of Working Group members support an approach based on setting the value of X to encourage CAP 164 applications from projects only when they are in receipt of planning permission. This would also reduce the GB queue for connections. They advocate setting the value of X at no higher than the number of years for which a planning permission remains valid. This is 5 years in England & Wales and 3 years in Scotland. Some Working Group members noted that 3-or 4 years is may be a reasonable average timeframe in which a project with planning permission, such as a wind farm, could construct a wind farm, although some could proceed to completion in shorter periods, and some might take even longer.
- 4.28 It was discussed that in order to limit the exposure of all Users, that X should not be set so low that Transmission Owners (TOs) and or the GBSO have insufficient time to reasonably prepare for the new generation. The Working Group noted the analysis undertaken previously as part of CAP131³. This presented an average time from receiving the planning consents associated with the (transmission system) to connection of the generator (for whom that transmission work was undertaken) of 46 months. This was believed to represent a reasonable time to construct transmission assets (ignoring consent, and design timescales).
- 4.29 The group discussed that if X is set too long, that the planning consents of the applicant generators may expire before TEC is granted. It was noted that it may be appropriate for the value of X to be lower in Scotland than in England & Wales to reflect the difference in planning consent validity. It was

³ Page 24 of <http://www.nationalgrid.com/NR/rdonlyres/DF79A171-683B-49BA-98B1-3E3D13968262/26301/CAP131WGReport10.pdf>

noted also that there is evidence from the past (for example, around the proposed Staythorpe CCGT) that the authorities will normally extent planning consents prior to expiration on request from the developer. It was noted that the planning consent validity period is measured from the granting of that planning permission to the start of construction works. For instance, if a generator project in Scotland takes 2 years to build then it would be allowed a total of 5 years from consent to commissioning. It was noted also that the definition of “start of construction works” is defined in the relevant Planning Laws. It is believed to mean that undertaking some ground preparation works within the term of the planning consent (i.e. within three years of its granting in Scotland and five years in England & Wales) would be likely to be sufficient to keep the planning consent ‘alive’.

- 4.30 The Working Group discussion has, as a consequence of these arguments, focused on whether the value of X should be 3 or 4 or 5 years and the rationale for settling on 3 or 4 or 5 years. The Working Group agreed to consider the results of an impact assessment, for CAP164, on constraint costs versus carbon abatement benefit, which it hoped would assist in reaching a decision.
- 4.31 Qualitatively, some Working Group members consider that a higher value of X (e.g. 5) partially mitigates the risk of an increase in constraint costs which would arise if transmission reinforcement works cannot be completed by the TEC Effective Date. Others believe that a lower value of X (e.g. 3) is more consistent with generator development timescales.
- 4.32 It was also noted that, should the new generation lead to a change in system management costs and hence a change to the levels of BSUoS, that other users should have sufficient time to reflect any estimated changes into their contractual arrangements. In respect of BSUoS changes, the sub group considered that as a minimum the value of X should not be less than 12 months. However, some members of the Working Group considered this ignored the need to balance the benefits to the connectee with the costs imposed on wider Users.

Lead time

- 4.33 The effect of a 4 year lead time can be shown by simply removing the results for 2012 from the analysis (shown in the table below) i.e. if 3 years brought plant forward until 2012, 4 years would only bring it forward to 2013 and so 2012 can be ignored.

Lead time	Total constraint cost	Total CO2 abatement	Net cost
3 years	£358m	£307m	£51m
4 years	£328m	£217m	£111m

NPV at 2009 with 8% discount

- 4.34 The transmission constraint costs are naturally lower for a 4 year lead time by virtue of removing a year’s worth of costs from the total. The net cost is lower for 3 years than for 4, because the 3 year data contains one very net positive year’s worth of data in 2012. National Grid explained this is as a result of the definition of boundaries in the model, in that it does not have internal Scottish constraints and so in practice National Grid would **not** expect to see 2012 as a net benefit.

- 4.35 It is difficult to make any firm conclusions from the analysis on whether 3 or 4 years is preferable, as the results are very much a function of the study design. However, it does seem possible to conclude that:
- A shorter lead time is beneficial in that it captures benefits available during a limited window where the transmission constraint costs are low and the benefits can be high, before a tipping point is reached.
 - A longer lead time is beneficial in bounding constraint costs where plant continue to connect past the tipping point and the system cannot be reinforced in time.
- 4.36 Responses to the Working Group consultation indicated mixed support for 3 or 4 years, with similar arguments to those expressed in the Working Group discussions. Some respondents requested further analysis on 2 and 5 years lead times. The Working Group discussed the interpretation carbon advice in the assessment of an amendment and the interaction with charging. The Working Group did not agree whether once carbon had been used in the overall assessment of the amendment proposals, whether this implicitly followed through to the charging arrangements i.e. whether it should be targeted and socialised.
- 4.37 The working group voted by a majority for a 4 year lead time. Therefore the lead time for CAP164 Original, the value of X, is agreed as 4 years.

Obligation to pay TNUoS

- 4.38 Under CAP164 the intention is that a new generator should connect to the transmission system and begin generation on the TEC Effective Date. In these circumstances, the generator would be liable to pay any eligible TNUoS charges from this date.
- 4.39 In the event that the generator cannot generate from the TEC effective date, but is not at fault for the delay, either because of a delay by the Transmission Licensee in completing the local works or by force majeure (excluding failure to obtain consents), then, under CAP164, the generator would not be liable to pay TNUoS charges until either those local work have been completed; i.e. it has a physical connection to transmission the system or the conditions that gave rise to force majeure have been reasonably remedied. For the avoidance of doubt, 'force majeure' here does **not** cover the contractual / commercial arrangements between the generator and its equipment provider etc.
- 4.40 Irrespective of whether the generator has commissioned or not, other than due to a delay caused directly as a result of LCWs or force majeure as described above, it will be liable to pay for "TNUoS" charges from the TEC effective date. It was noted that in these circumstances, the generator would still be liable for any financial securities or User commitment. It was considered that should this situation persist, that the required securities should be reduced by the amount of any Use of System charges that have been paid on an ongoing basis. For example, if the total securities are £1m and the annual charges are £100k then, after two years, the generator would be liable for £800k on termination.
- 4.41 The group noted that in a negative zone, there would be no TNUoS paid and so the liability remained the same as for a pre connection.

Force Majeure for wider works

- 4.42 The Original CAP164 Amendment proposal was silent on Force Majeure for wider works. The Working Group discussed that the implication of a fixed TEC Effective date is that failure to gain planning permission for wider works is not a Force Majeure event. The proposer understood that this was preferable for parties wishing a fixed date and clarified that this was the intention of the Original proposal. The Working Group accepted this view.

Constraint costs and carbon abatement assessment

- 4.43 To inform the assessment of CAP164 against the CUSC applicable objectives, and mindful of the Ofgem guidance⁴ to the administrators of industry codes on incorporating, via a carbon price, the carbon abatement benefits of proposed amendments, National Grid undertook some analysis of the constraint costs and the carbon abatement benefits, from CAP164, of advancing the transmission connection dates of queued generators.
- 4.44 A sub group was tasked with reporting back to the Working Group on an assessment methodology.
- 4.45 The sub group agreed the principles of:
- 1) Establishing an existing baseline scenario for the GB generation mix to 2020 which is assumed to prevail in the absence of CAP164.
 - 2) Establishing a CAP164 scenario where connection dates are brought forward by allowing connection in advance of wider system reinforcement.
 - 3) Subtracting (1) from (2) to derive the additional volume of renewables generation provided by the advancement, and the associated constraint costs and avoided carbon cost.
- 4.46 A list of the detailed assumptions for the impact assessment, for CAP164, is provided in Annex 5. Some key assumptions are:
- The basis of the generation mix for both the baseline and CAP 164 scenarios is the TEC Register, with some assumptions on drop-out rate: a 20% drop out rate⁵ is assumed for wind energy, and 70% for other plant. These are applied uniformly as a percentage reduction in contracted MW.
 - Plant affected by the Large Combustion Plant Directive (“LCPD”) close in 2015. Oil-fired plant also close in 2015. The nuclear AGRs are granted 5 year life extensions, after which they close. No other closures are modelled.
 - Transmission system reinforcements in the Seven Year Statement (“SYS”) are included for both the baseline and CAP 164 scenarios. After 2015, it is assumed that the system can be reinforced to maintain a compliant system and meet currently contracted dates, for the baseline. No 2015+ reinforcements are included for the CAP 164 scenario.
 - The analysis models constraints on six boundaries, none of which are between Scottish zones i.e. the only Scottish boundary modelled is the Scotland-England boundary.

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<http://www.ofgem.gov.uk/Licensing/IndCodes/Governance/Documents1/Open%20letter%20response-%20final%20version%20of%20letter%2030%20June.pdf>

⁵ From the contract position in the SYS – the percentage that fails to connect

- Under the CAP 164 scenario, 50% of wind energy plant and 25% of other plant are advanced by 3 years, again, applied as a flat percentage on contracted MW remaining after the assumptions on drop-out and closures.
 - The impact of a fixed lead-time (X years) is that only plant with contracted dates X years or more from the first modelled year (2009) can be advanced.
 - The modelling goes out to 2020 and hence a longer lead-time reduces the period over which the effect of CAP 164 is modelled. Furthermore the TEC Register tails off over time and so the plant available to advance in later years also tails off.
- 4.47 The transmission system constraint costs for each scenario are calculated from first running a model which meets demand from the most economic mix of generation available on an unconstrained network. The model is then re-run with constraint boundaries, and the costs of adjusting generator's output (reducing output / constraining off generators behind the constraint and increasing / constraining / on generators in front of the constraint) make up the short-run constraint costs.
- 4.48 The analysis is then repeated with a CAP164 generation background. The difference in constraint costs between the baseline and the CAP164 scenarios is attributed as a cost to CAP164. The carbon abatement arising from a reduction in fossil fired plant running is credited to CAP164 as a carbon saving.
- 4.49 The model does not include any effects on reserve or losses (with the expectation that these costs would be higher in the CAP164 scenario). The Working Group discussed if these costs should be included in the analysis. The group agreed that given time and resource constraints, it was important to focus effort on the principal costs and benefits of CAP164. Other costs should be noted, and either taken into account quantitatively at a later date, or assessed as part of any qualitative analysis.
- 4.50 As well as the aforementioned costs associated with reserve and losses, some Working Group members felt that there were additional benefits of CAP164 which should also fall into the category of "other". This might include a reduction in wholesale energy costs arising from a low-carbon generation mix, the avoided costs of importing gas over long distances, and the potential for the cost of carbon to rise. These additional items are not included in the CAP164 quantitative impact assessment.
- 4.51 A potential additional income stream from "excess TNUoS" charges that could be used to offset constraint costs was also discussed. As has been stated generators connecting under CAP 164 provisions would expect to pay the same "TNUoS" charges as other generators. However by definition these generators are assumed to be connecting before all appropriate transmission infrastructure is completed. Without going into the detail as to how the Transmission Owner price control may operate, if it is assumed that Transmission Owners are allowed revenue to fund infrastructure actually built and that CAP 164 connecting generators do not pay TNUoS to reduce TNUoS charges to others, then there is potentially a pot of "TNUoS" payments from CAP 164 connectees over and above that required to fund Transmission Owners' investment in infrastructure that could be diverted to additional "BSUoS" income to offset additional constraint costs. In other words all TNUoS payers are intended to pay for transmission infrastructure

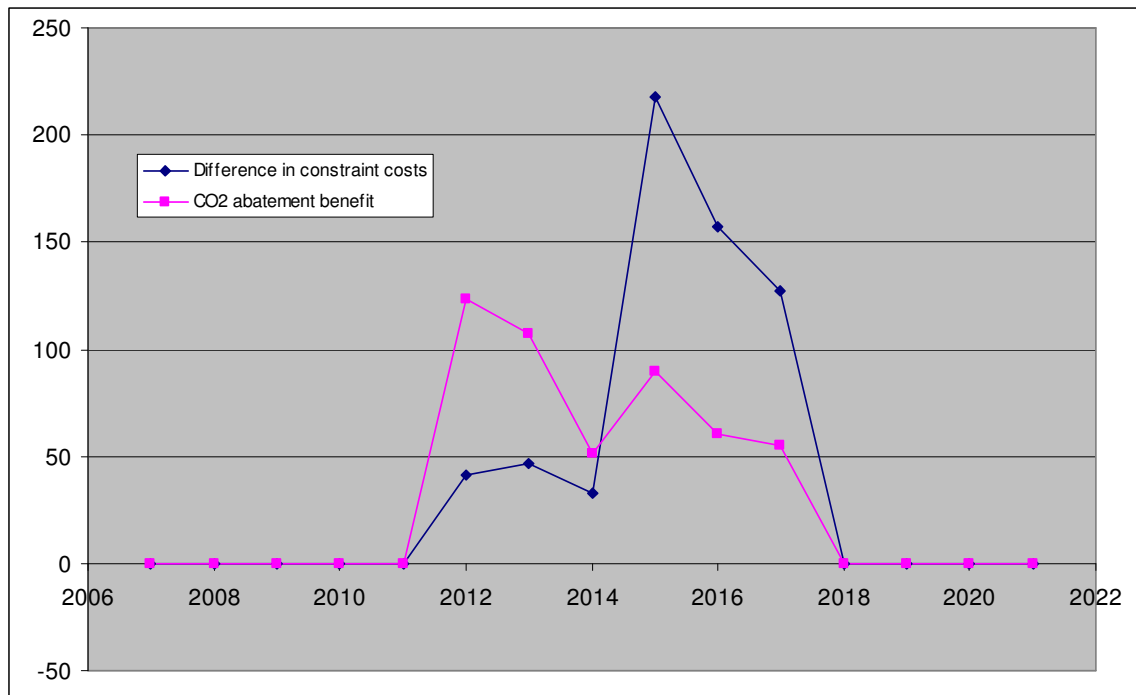
“actually built” and CAP 164 connectees, if they paid the same amount as the equivalent standard TNUoS charge would initially pay for the local infrastructure actually built plus a sum that would offset higher constraint costs.

- 4.52 This raises a number of secondary charging issues that will be discussed in a charging pre consultation, particularly whether the ‘additional’ generation would be modelled in the charge setting process. Other members thought that this could be better represented as the parties who connect early pay a short term charge that is fixed at the level of TNUoS. Nevertheless, the income would not offset the additional constraint costs in total. Within the TNUoS model the amount recovered from Generation is fixed to 27% of the allowed revenue of the Transmission Licensees. Therefore if Cap164 recovers more from CAP 164 parties this would normally be returned to all generators to maintain a 27%. Accepting an increase in allowable income from local works for CAP164 generation, using this revenue to fund BSUoS would need changes to the charging and revenue arrangements under the methodologies and the licence. Some Working Group members discussed that a direct charge (e.g. as a balancing service) would achieve the same result as intended, but be more efficient to administer and transparent for users.
- 4.53 The avoided carbon cost is calculated from the overall difference in output from fossil-fuelled generation between the baseline and the CAP164 scenario. This is derived separately for each fossil fuel type and multiplied by the relevant factor for tonnes of CO₂e per unit of output and the assumed cost of carbon for that year.
- 4.54 The cost of carbon is taken from DEFRA’s “Shadow Price of Carbon” (“SPC”)⁶ which is an estimate of the marginal cost of mitigating the effects of climate change for a given target reduction in atmospheric carbon levels i.e. if the carbon is released into the atmosphere, it will cause damage which will need to be paid for. The Working group also discussed repeating the analysis with the EU ETS price; however this has not been done. The results can be converted to EU ETS assessment by multiplying the abatement cost by the ratio of EU ETS to SPC. The EU ETS price not fixed, so inclusion would increase the subjectivity of the results. Furthermore the EU ETS is generally assumed to be lower than the SPC so would result in a more negative costs benefit.

Constraints versus carbon benefit: results

- 4.55 The graph below shows the first set of results from the analysis for a 3 year lead time for CAP164 connections (based on the DEFRA Shadow Price of Carbon (“SPC”).

⁶ <http://www.defra.gov.uk/Environment/climatechange/research/carboncost/index.htm>



4.56 It shows that:

- The carbon abatement benefit exceeds the transmission system constraint cost in 2012-14.
- The transmission system constraint costs exceed the carbon abatement benefit in 2015-17.

4.57 It is very important to understand the underlying assumptions which lead to these results.

4.58 There is no difference between the baseline and CAP164 scenario in the years up to 2011 because of the fixed lead time of 3 years before the TEC Effective Date. There is no difference from 2018 onwards because the study period looks at the contracted background and does not include any estimation of future generation projects which might advance to the years beyond 2018. In practice it is expected that a percentage of future transmission connections beyond 2018 would select CAP164 arrangements and this would cause an incremental cost and a carbon saving at the same time. Including this would be hugely speculative and given the outcome of the analysis (see the results below) was not considered necessary.

4.59 The fact that the carbon abatement benefit exceeds the transmission system constraint costs in early years is due to a combination of relatively high volumes of wind based generation projects being advanced to 2012-14, before the model reaches a point where constraint costs rise quite steeply.

4.60 There is a sharp rise in transmission system constraint costs in both the baseline and CAP164 scenarios in 2015. This is when the model starts to constrain off more low carbon intensive generation, and constrain on more relatively expensive generation. At this time the constraint costs are high and the amount of wind based generation projects being brought forward by CAP 164 reduces.

- 4.61 The fact that this sharp rise in costs does not occur earlier suggests that there is some spare capacity in the transfer capabilities of the boundaries that were modelled. National Grid believes that the Scottish transmission system is already more or less 'full' and points to current levels of constraint.
- 4.62 Because National Grid's analysis is at quite a coarse resolution it ignores some of the existing constraints on the transmission system. Nonetheless, National Grid's analysis does seem to show scope for early connection of some contracted capacity where the constraint costs would be offset by the monetised carbon abatement. Further investigation would be required to pinpoint the relevant locations on the GB transmission system.
- 4.63 It should be noted that the CAP 164 scenario also includes advancement of some 125MW of CHP plant in Scotland that would show a lower or zero carbon abatement benefit in return for increased constraint costs. This is not thought to have a significant effect on the results.
- 4.64 The assumptions on lead times and the number of years that the projects will advance affect the total costs and benefits where the study period is fixed.
- 4.65 Assumptions on when and where the transmission network is compliant affect the timing of any tipping point when constraint costs rise more steeply.
- 4.66 Assumptions on the volume of plant connecting and the speed with which the Transmission Licensees can provide reinforcements also affect the timing and extent of any tipping point. If the volume of plant assumed to advance under CAP164 is such that it substantially outstrips the ability of the Transmission Licensees to gain consent and build transmission reinforcements, then this will clearly impact upon constraint costs. The model assumes all planned reinforcements will be built to the timescales scheduled in the SYS. If in practice reinforcements are delayed, this would increase the cost of constraints.
- 4.67 Naturally, constraint costs are higher for a less compliant network, and the CAP 164 scenario is showing the effects of having a lower level of compliance. When the unit transmission constraint costs are high, it shows that the value of carbon abatement using the SPC is not enough to provide a positive net figure. When the transmission constraint costs are lower, and the unit carbon abatement value is higher, or the system has some limited spare capacity available, there could be a positive net value figure in the carbon abatement value. There are other factors complicating these tentative conclusions, but in simple terms this is what the results seem to show.

Other Impact assessments

- 4.68 The Working Group was also cognisant of other Connect and Manage Impact Assessment studies undertaken for CAP 148, and published during the course of the Working Group's deliberations. These were:
- Ofgem's impact assessment of CAP 148, including its consultant's, Brattle, analysis on the costs versus the carbon abatement benefit.

- A renewables industry-commissioned study from CEPA⁷, also on the costs and benefits of CAP 148.

Readers of this document might wish to avail themselves of these studies.

- 4.69 There are a number of significant differences between these two studies and between each of them and the National Grid analysis. Some key differences are summarised below.

ROC Price

- 4.70 Brattle's analysis debits CAP 148 with the ROC price for the additional renewable energy generation brought forward by a Connect and Manage policy. It does this because it assumes that by the time Connect and Manage has effect (around 2012-13) there is enough renewables output to trigger a change from the current Renewables Obligation to the government's proposals for a so-called "headroom" based mechanism. The existing Obligation is a fixed cost regardless of the volume of renewable energy generated, and so as long as this mechanism lasts the ROC cost of additional CAP 148 generation could not be attributed to the policy. The proposed headroom mechanism adjusts the cost to the consumer with the actual output of qualifying generation.
- 4.71 Neither National Grid's nor CEPA's analysis takes account of the ROC price adjustment proposed by the Government. CEPA's omission is deliberate because it does not believe it to be an additional cost attributable to CAP 148. Rather, it is a cost that will be incurred in meeting existing government targets. For it to be an additional cost, it would arguably be necessary to present an alternative approach which achieves the same level of renewables generation as CAP148 at a lower cost.
- 4.72 National Grid's analysis excludes the impact of ROC adjustment because it is not in the baseline. The Working Group was split as to, even if it was in the baseline, approved and implemented policy, whether it should be part of the cost benefit analysis or not.

Modelling of constraints

- 4.73 Brattle's approach is based on comparing the results from separate modelling, for the same market assumptions, of generator connections and short term operation both in the absence of CAP148 (the "counterfactual") and with CAP148. In modelling short term operation Brattle first uses plant availability and marginal cost assumptions to derive a merit order from which unconstrained output and wholesale market prices are derived. It then adjusts these outputs to take account of transmission constraints using a simplified zonal flow analysis of SYS boundaries. National Grid's analysis of short run constraint costs is very similar in approach.
- 4.74 CEPA's analysis is based on a financial model. It considers the impact on generation connections by estimating the total volume of generation in the TEC register that could benefit from CAP148, scales this to reflect dropouts and determines the scope for acceleration based on average project timescales. It makes assumptions about load factors, incidence of constraints and the price at which constraints would be resolved in order to calculate incremental operational costs.

⁶ Assessing the impact of amendment proposal 148, August 2008, A report for the British Wind Energy Association.

Constraint boundaries

- 4.75 Brattle's analysis includes within-Scotland boundary constraints. This results in ROC-eligible plant being constrained off in the model where it is behind a Northern Scotland constraint. This tends to make Connect and Manage more expensive sooner than in National Grid's analysis which ignores these boundaries. National Grid indicated that it had reviewed the Ofgem-commissioned analysis and thought that it was more accurate for within-Scotland constraints where Connect and Manage brings forward appreciable volumes of renewable generation in the North of Scotland. It also results in new renewable plant constraining off existing renewable plant.
- 4.76 The Working Group agreed that there was no benefit in new low carbon plant being connected with the result that other low carbon plant was constrained off for much of the time. If this situation could be avoided (see 5.2.1 below), the cost benefit analysis would be expected to become more favourable to the proposal.

Liabilities

- 4.77 The Working Group discussed the commitment / liability required for CAP164. The Original proposal indicated that Users should be required to pay TNUoS for a limited period. Under existing final sums arrangements once users connect the majority of the liability falls away, leaving only the liability to TNUoS for that year.
- 4.78 The Working Group discussed the interaction between CAP164 and CAP165 (finite rights). The Working Group noted that under CAP165 Original that there is a minimum booking period of 8 years for new capacity when works are triggered. It was noted that under CAP165 Original that the liability would be 8 years of the local charge.
- 4.79 Some Working Group members and respondents to the Working Group consultation expressed a view that the concept of a rolling 4 year right (CAP165 WGAA3) worked well with a lead time of 4 years under CAP164.

Embedded Generation

- 4.80 The Working Group noted that CAP164 does not cover embedded generation that is not granted TEC through a bilateral agreement. This concerned a number of Working Group members. National Grid indicated that the Original amendment proposal assumed a level of commitment and this is related to TNUoS liability, so was not applicable to generation not liable for TNUoS.
- 4.81 The Working Group also recognised that it would be difficult to implement a cost reflective charge on an embedded unlicensed party under the existing Industry framework.
- 4.82 The Working Group accepted this position recognising that embedded generation arrangements are being discussed elsewhere at the moment and that a more holistic review of embedded arrangements generally is expected following TAR.

5.0 WORKING GROUP ALTERNATIVE AMENDMENTS

- 5.1 Prior to the Working Group consultation a Working Group member tabled a number of suggestions which could form the basis of a candidate for a Working Group Alternative Amendment(s).
- 5.2 The rationale for proposing these variation to (CAP164) Connect and Manage (which the Working Group may or may not consider as a candidate for a CAP164 Working Group Alternatives Amendment) is threefold:
- (1) An unlimited Connect and Manage approach which has no checks or balances could result in some arguably unintended consequences. An example is renewables constraining off renewables (a potential flaw within Ofgem's CAP 148 impact assessment). Or very high transmission constraint costs where large volumes of plant are connecting on the wrong side of a constraint boundary and where there have been unavoidable delays in delivering reinforcement.
 - (2) There are significant benefits in a Connect and Manage approach which are not reflected in the proposals to target costs through the "Evolutionary change" combination of CAPs 161-163 and 165. These are that CAP 164:
 - (i) Is premised on constraining off generation, rather than requiring generation to constrain itself on when it can purchase access, (or incur unpredictable Overrun costs, if CAP162 is implemented). This is an important technical feature for some intermittent generators.
 - (ii) Provides predictability of costs and revenues, for generators, which is essential for securing finance.
 - (3) There is an element of socialised costs in some of the other "evolutionary change" CAPs. Furthermore, transmission constraint costs are traded off against reinforcement costs and should not, *per se*, be a reason to delay connection. It is the level of acceptable costs, and how these compare with other solutions, which is the key point for debate.
- 5.3 With these factors in mind, the suggested variations to CAP164 are intended as a means of reigning in some of the costs of CAP 164 / CAP 148 modelled in the various impact assessments, while retaining the beneficial features of Connect and Manage described above, (in addition to advancing connection dates as far as possible).
- 5.4 It should be noted that the impact of any of the potential variations to CAP164 proposals which follow is linked to the impact on costs of an unlimited Connect and Manage approach. Pending the formal Working Group agreement that one, or more, of these variations is a CAP164 Working Group Alternative Amendment, the impact assessments differ in their assessment of where costs are incurred, it is difficult to say conclusively which proposal would be the most effective in limiting costs. It may be that thresholds could be applied which would be activated should certain conditions be met.
- 5.5 The suggestion approach with these variations (which may or may not form a CAP164 Working Group Alternative Amendment) tabled proposals which might form the basis of one or more Connect and Manage Alternatives are:

An Interim TEC-like approach

- 5.6 A proposal for an “Interim TEC” (ITEC) product was put forward as a previous CUSC Amendment (CAP 143). Its key feature is that it defines in advance a level of non-remunerated constraint (Y) of the generators taking advantage of ITEC.
- 5.7 Discussions in the CAP 143 Working Group were around the level of Y, and whether it should be a flat rate or be reduced with the level of transmission network non-compliance. With the latter approach there would be a first-come-first-served benefit.
- 5.8 The basic intention of ITEC was to accelerate transmission connection dates in advance of system reinforcement, to provide certainty of revenues via a pre-defined level of Y, but to limit constraint costs through an appropriate level of Y.
- 5.9 Ofgem rejected ITEC, *inter alia* citing the (then) forthcoming Transmission Access Review work and the possibility of an alternative solution. Given that CAP 164 can be expected to lead to higher costs than an ITEC product, the Working Group discussed whether it is appropriate to introduce a variation to CAP 164 Alternative which defines an appropriate level of non-remunerated transmission constraint. In addition, should this still be linked to fixed lead time for firm transmission access and remuneration of all constraint, or should firm access be linked to the completion of wider works.
- 5.10 Although under CAP 143 the idea was that the new generator could be constrained off without compensation for Y hours per year, a number of people thought that it might make more sense for the new generator to run but to pay for Y hours per year for a more expensive / higher carbon emitting generator to be constrained off. If CAP 162 (overrun charging) were implemented this would facilitate this “alternative to CAP 143” i.e. the new generator would have to pay overrun charges for Y hours per year if it chose to run for those hours.

Bid Cap

- 5.11 A Bid Cap would limit the amount that generators could bid into the Balancing Mechanism to be constrained on or off. This would in turn limit transmission constraint costs and hence the costs passed through to consumers under CAP164. A Bid Cap could apply just to CAP164 Connect and Manage generators, or to all generators. The latter approach would limit the freedom of existing generators to bid as circumstances dictate, and the majority of the Working Group was not in favour of this option.
- 5.12 The Working Group agreed that any Bid Cap would have consequences for the operation of the Balancing Mechanism, and that as such it would need to be scrutinised in these terms.

Volume cap

- 5.13 A Volume (MW) Cap would limit the amount of generation that would be allowed to connect in advance of wider transmission system reinforcements. This could be applied on a GB-wide basis or there could be different volume (MW) caps for key boundary constraints / zones.

- 5.14 A Volume Cap would have a first-come-first-served benefit i.e. whoever applied for it first would get it.

Planning permission for wider works

- 5.15 CAP164 Original Amendment excludes planning permission for wider works from Force Majeure, and this, in the view of some, is thought to be a defining feature of a Connect and Manage approach. However, a Working Group member asked whether the new more strategic-based approach to infrastructure planning – both in government and through 2020 target-based initiatives – might provide more streamlined planning permissions for strategically planned infrastructure. In this case, would it be appropriate to link a Connect and Manage policy to these strategic plans? For instance by allowing Force Majeure for infrastructure which is not part of any strategic plan? Working Group members noted that the group was limited to only considering whether an Amendment proposal (or Alternative) better met the CUSC Applicable Objectives.

TO and SO Incentives

- 5.16 Some Working Group members questioned whether National Grid's incentives for managing transmission constraint costs and the balance between constraint costs and reinforcements, might be sharpened. The Working Group acknowledged that these comments could be fed into other related workstreams on TO/SO incentives.

Industry views

- 5.17 The Working Group requested views in the Working Group consultation on the possible features of a Working Group Alternative Amendment discussed above.
- 5.18 Whilst some responses supported the concept of Bid Cap recognising its potential to limit costs to third parties, others were concerned about negative effects on competition and the Balancing Mechanism. Respondents also expressed concern about the methodology for setting the Bid Cap level, and also the subjectivity within the methodology and in its application.
- 5.19 The comments on Volume Cap were similar to those on Bid Cap, supporting that it was a reasonable and pragmatic way forward and repeating concern on the negative consequences of a restriction. In addition, concern was expressed over possible discrimination in applying a Volume Cap.
- 5.20 On the issue of an ITEC type restriction responses were split between that this was a reasonable mechanism for mitigating additional costs through to it would involve additional risk for third parties (e.g. through the SO forecast of hours) and it inherently accepts a level of sharing of costs (when the forecast restriction is less than 8760 hours per annum).

Working Group Alternative Amendment

- 5.21 The Working Group received one request for a Working Group Alternative Amendment. This seeks to mitigate the costs to third parties, yet still provide access on a date in advance of the wider reinforcements. The proposal suggests an ITEC approach to achieve this. The Working Group set up a sub group to discuss the development of the request. The WGAA was

presented to the Working Group at the 14th Working Group meeting on 12th November 2008. The Working Group subsequently agreed to take forward the WGAA, as developed by the sub group, as a formal WGAA.

- 5.22 The WGAA developed provides an ex ante cost reflective price for a firm product which is bankable. The Working Group preferred this approach to options which sought to limit the cost of early connection by restricting the output from newly connected parties. Restricting output from newly connected parties did not appear to provide an efficient overall solution.
- 5.23 This product provides a firm date for long term transmission access and a firm price for the operation costs payable between the completion of the local connection and the firm date for long-term transmission access. The product does not have a fixed lead time (e.g. 4 years) but a the fixed date for moving from ITEC to TEC charging arrangements would be fixed as the time in which the transmission licensees reasonably forecast the required infrastructure works could be completed. This fixed date can not be changed if planning consents for the wider works were subsequently delayed..

Application for connection

- 5.24 Users submit an application for a connect & manage connection to National Grid which details:
- Local capacity nomination (MW);
 - Requested date for local capacity nomination;
 - Level of wider long-term transmission access rights (MW).

Assessment of applications performed by the System Operator

- 5.25 The System Operator will take the applications for connect & manage connections and determine:
- The reinforcement works required to provide a local connection;
 - The date by which it is anticipated that these local works will be completed;
 - The reinforcement works required to provide wider long-term access;
 - The date by which it is anticipated that these wider works will be complete;
 - The operational costs caused by allowing the user to connect for the period between the completion of the local works and the completion of the wider works. This would be used to derive a fixed cost reflective price which could either be a flat £/kWh figure or profiled on a seasonal/monthly/weekly/daily basis where this could provide improved cost reflectivity.
- 5.26 The Working Group discussed the interaction between the volume of connect & manage generation and the operational costs (and therefore price). The options discussed to deal with this interaction are:
- First come first served
Treat applications in the order in which they are received, with previously accepted offers providing the only background for the consideration of new applications. If concurrent applications are received, then the associated offers interact such that the acceptance of one would invalidate the other. This would be handled with arrangements which give priority to the user that accepts first (unless two or more users accept on the same business day, in which case priority is given to the user that was first to apply).
 - Batch processing of connection offers

Provide a “window” for applications and treat all applications received in the same window together, i.e. all applications are assumed to be in the background. This will lead to the cost (and therefore price) being calculated based on all users accepting their connections offers. If some users do not accept, then the cost (and therefore price) will be recalculated.

- 5.27 The Working Group agreed that the batch processing option was the preferred option. There are likely to be a number of users seeking a connect & manage simultaneously and therefore the interactivity arrangements associated with first come first served are likely to be prohibitively complex and time consuming.
- 5.28 All applications received in a particular 6 month period up to an “application window closure date” would be treated together and National Grid would be required to make connect & manage connection offers within 3 months of the window close date. For transition the Working Group agreed the initial assessment period would be 6 months. It is envisaged this extended period would need to be covered by a transitional transmission licence condition (e.g. to cover timescales required by SC8) and transition section in the STC and / or SCTPs that deal with connection offer process.

Connect & manage connection offer

- 5.29 The connect & manage connection offer will include:
- The reinforcement works required to provide a local connection;
 - The date by which it is anticipated that these local works will be completed
 - It should be noted that planning/consent delays to those works listed as local works would result in a delay to the local works completion date;
 - The fixed price associated with short-term access to the transmission system, (£/kWh) which is applicable between connection and the date for the completion of wider works;
 - The date by which it is anticipated that the wider works will be complete
 - This date will be fixed irrespective of any subsequent issues with the planning/consent required for wider works.
- 5.30 The connect & manage connection offer will be open for acceptance for a further period of 3 months. During the 3 month acceptance period, users are free to request delays to the local connection date. This may be particularly useful if the short-term access price is particularly high in the years immediately after the local connection date. The System Operator will accept requests for delays and provide updated offers where possible.
- 5.31 The short-term price will be recalculated based on those users that have accepted their offers.
- 5.32 The process will then be restarted with accepted connect & manage offers in the background for all future batch assessments. It is worth noting that this is likely to mean that prices in future rounds are likely to be higher.

Pre-commissioning and Post-commissioning connect & manage

- 5.33 Pre and post commission liabilities are unaffected by CAP 164. Implementation of CAP165 would impact on the liabilities. Pre-

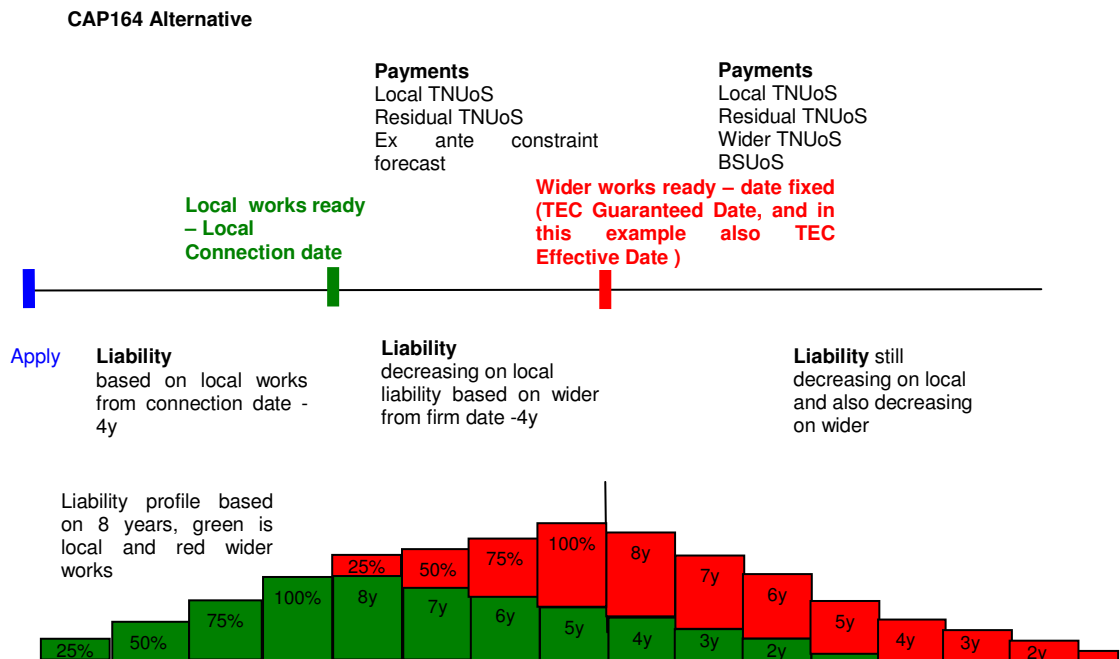
commissioning connect & manage users will be required to face liabilities and securities as today, unless modified by the approval of CAP165 or one of its alternatives. An example of how this could work with generic final sums regime is shown below.

- 5.34 Post-commissioning connect & manage users will be able to submit bid price in to the Balancing Mechanism as any other users (subject to any design variation conditions in the BCA).

Example of liability

- 5.35 This example is based on a 4 stepped 25% pre commission liability and an 8 years from commission liability (similar to Generic Use Commitment and CAP165 Original). Users have a commitment based on local and wider works independently, relating to the Local Connection Date and the TEC Effective Date respectively. i.e. in the period between Local Connection Date and TEC Effective Date users will be liable for local works based on 8 years TNUoS (i.e. post commissioning) and also subject to ramping on wider works (i.e. pre commissioning).

- 5.36 If local works are delayed by the SO the Users liabilities are delayed accordingly. The Working Group discussed that the firm date for wider works should be regard as a backstop date i.e. users could switch to TNUoS charges earlier if wider works were completed earlier than the TEC Guaranteed Date, this earlier date is the TEC Effective Date. This backstop date, Guaranteed TEC Date, would have no force majeure. The TEC Effective Date and TEC Guaranteed Date are both contingent on the Local Connection Date i.e. force majeure on the local connection could delay the TEC Effective Date and TEC Guaranteed Date.



- 5.37 In terms of cost benefit analysis the WGAA avoids passing the cost of additional constraints through to other users, subject to the accuracy of the forecast short term cost and the accuracy of the commission date of wider

works. Exposing parties who connect ahead of wider infrastructure to a fixed ex-ante cost allows them to internalise the additional costs and so provide a more efficient outcome for the end consumer.

- 5.38 Whilst it is recognised that these risk do represent an additional cost, when compared to the cost of carbon, the risk associated with an error in the forecast is much less than the actual operational costs. It is also recognised that the forecast may be positive as well as negative and that SO and TO incentives on both of these forecasts are important.
- 5.39 The definition of local works discussed for the Original would be applicable for the WGAA.
- 5.40 The system used for settling the ex ante charge were envisaged to be similar to those developed under CAP162 i.e. daily charging based on BSUoS. The IS assessment was based on this, along with weekly billing.

6.0 ASSESSMENT AGAINST APPLICABLE CUSC OBJECTIVES

This section includes all of the Working Group views, both for and against. This reflects the largely polarised position with respect to the Original Amendment.

Proposed Amendment

- 6.1 The Working Group considered the CAP 164 Original amendment against the CUSC applicable objectives:
- (a) the efficient discharge by the Licensee of the obligations imposed upon it by the act and the Transmission Licence; by

Permitting more generation to connect to the transmission system in areas which are already constrained i.e. North-West Scotland then this may lead to increased constraint costs as the wider transmission system would not be ready to accept the anticipated increases in generation (this was indicated in Ofgem's Regulatory Impact Assessment for CAP148 which allowed only new Renewable generation to connect and showed that the likely Carbon cost savings would be far outweighed by increased constraint costs).

It is likely that generation connecting under CAP164 Original would be Wind and also likely that this would connect in Scotland and possibly constrain off other renewable generation. It is unlikely that the carbon savings from the proposal (especially with a 3-year guaranteed connection period) would outweigh the likely significant increases in constraint and transmission losses costs – this is borne out by an assessment by National Grid for Working Group 1.

The National Grid assessment does not take into account any other potential benefits such as the associated decrease in wholesale electricity prices (not all Working Group members agreed that this saving is demonstrable). Neither does it take account of possible increase in the costs of the ROC mechanism suggested by Government to meet wider environmental policy objectives.

Allowing generators the option of a TEC effective date incentivises Transmission Licensees to provide new connections in an efficient and timely

manner. However where the key barrier is outside Transmission Licensees gift, such as planning consents, it may not be efficient for Transmission licensees or consumers to take on this risk. Arguably the commitment to a firm date by a User could improve the planning position.

CAP164 Original is not discriminatory as it provides an option to all generation types but in practice most non-Renewable generation will seek to locate in less constrained areas of the transmission system and will be offered connection timescales commensurate with its build programme for a TEC effective date.

It is unclear whether CAP164 Original would improve investment signals as the requirement to build additional transmission in Scotland is already known but is prevented from happening due to planning and other constraints. These should be removed as soon as possible to allow the necessary transmission investment to be made. In addition, providing incentives to Transmission Licensees to invest is likely to be more difficult under C&M if the management costs are recovered from customers. As all new connections will pay the TNUoS charge from their TEC effective date this may be a sufficient signal to the Transmission Licensees.

CAP164 Original provides improved investment signals in a number of ways. Firstly it allows the SO to plan investments against a smaller number of access requests which each have a high degree of certainty of connection. It encourages and rewards strategic investment by the Transmission Licensees in advance of future access requests. In addition, it encourages the development of new operational management measures (not just constraints) where these are cost effective alternatives to network investment.

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

CAP164 Original facilitates competition by allowing for more new connections.

It further facilitates competition by removing the existing barriers to connection of new generation.

The resulting increase and volatility in constraints caused as a direct result of Connect and Manage is borne by the generality of users, increasing instability of charges act as a barrier to entry (supply and generation) and thus frustrate competition. In the context of generation the benefits are likely to outweigh the negatives.

The generation most expected to use Connect and Manage are heavily subsidised and therefore not competing. The most efficient thermal generation on the system may be prevented from running in favour of less competitive units.

Cap164 Original could be discriminatory as it would provide connection to generators before the necessary wider system reinforcement was completed and socialised the increased constraint costs, inevitably increasing the risks and costs of other market participants through increased constraint and reserve costs (and hence increasing consumers' costs would be borne by all users.

Working Group Alternative Amendment

6.2 The Working Group considered CAP 164 Working Group Alternative Amendment against the CUSC applicable objectives:

- (a) the efficient discharge by the Licensee of the obligations imposed upon it by the act and the Transmission Licence; by

Facilitating early connection through providing a firm connection date and an ex ante charge, based on the forecast wider works completion date and the increase in operational costs prior to the wider works being completed, would better enable projects to gain finance and thus connect, facilitating more efficient use of the transmission system.

Subject to the accuracy of the forecast wider works dates and the ex ante estimate of increase in operational costs third parties would largely be held largely whole. The transmission licensees are better able to forecast and manage the completion of wider works and the impact on operational costs than the new connectees.

CAP164 WGAA provides improved investment signals in a number of ways. Firstly it allows the SO to plan investments against a smaller number of access requests which each have a high degree of certainty of connection. It encourages and rewards strategic investment by the Transmission Licensees in advance of future access requests. In addition, it encourages the development of new operational management measures (not just constraints) where these are cost effective alternatives to network investment.

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

CAP164 WGAA facilitates effective competition in generation and supply of electricity by facilitating early connection allowing parties to participate in the market earlier than they otherwise would be able to.

Connections facilitated through CAP164 will be charged cost reflectively based on forecast increase in operational cost prior to wider reinforcements, this better facilitate effective competition in generation market.

CAP164 WGAA further facilitates competition by removing the existing barriers to connection of new generation.

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 With the exception noted below, it is not anticipated that CAP 164 (Original or WGAA) will require any new functionality in IS systems. However, it is possible that CAP 164 (Original or WGAA) may lead to an increase in the volumes of data and number of transactions that must be handled by existing systems. To accommodate these increases some changes to existing systems may be required. Such changes are difficult to predict and are excluded from this impact assessment.

7.4 The exception is that WGAA may require the introduction of systems to accommodate a daily charging regime.

	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	Jun-09	NO IS IMPACT							
WGAA	Jun-09	Apr-10	10	16	NO	YES	•		

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

7.5 There are many limitations on the scope of this initial IS impact assessment. Examples include:

1. Only the impact on National Grid’s IS systems has been assessed. The impact on CUSC parties’ IS systems has not been assessed.
2. Only the costs of the projects required to deliver the necessary systems have been estimated. Additional run-the-business costs relating to IS systems are likely to be incurred, these have not been estimated.
3. There has been no analysis of any IS effort or systems required during the transition from the existing arrangement to the new arrangements.
4. Each CAP and each option associated with it has been assessed in isolation. The impact on time and cost of multiple projects running in parallel has been ignored.
5. National Grid has not assessed the work against its existing IS workload to assess resource availability.

7.6 A more accurate IS impact assessment for the Original Amendment and the Working Group Alternative Amendment would require a number of items which are not currently available. These include:

1. Definition of the business requirements for the Original Amendment and the Working Group Alternative 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.

7.7 Without prejudicing the decision of the Authority, National Grid intends to undertake further analysis between November 2008 and March 2009. This

analysis will attempt to address point 1 above by making assumptions about the most likely detailed business requirements and will attempt to address point 2 by undertaking a number of feasibility studies. To address point 3 the analysis will consider the consequences a variety of possible combinations. The results of the analysis will be made available to CUSC parties and the Authority.

- 7.8 An enduring resource requirement of ½ Full Time Equivalent is estimated to for the enduring processes in settlement of the new charge. There will also be additional traditional resource requirements for all transmission licensees which are directly dependant on the volume of projects wishing to come forward.

8.0 PROPOSED IMPLEMENTATION AND TRANSITION

- 8.1 National Grid is particularly interested in industry views on the proposed implementation issues and timescales proposed below.

8.2 Assumptions:

1. Local charging GB ECM 11 is implemented in April 2009, or if vetoed other local charging arrangements are in place on or before CAP164 WGAA implementation
2. Residual charging cannot be implemented until April 2010. The critical path is charging process, including the probable need for an impact assessment. Early implementation could be possible, and there are a number of options. These would have significant implications for revenue recovery and charging process and methodology.
3. The WGAA requires daily settlement. The earliest date by which IS systems for daily settlement could be delivered is April 2010.

- 8.3 The Working Group proposes CAP164 Original should be implemented **10 days** after a decision. The Working Group requested view on this approach in the Working Group consultation and received general support.

- 8.4 The Working Group also discussed transitional arrangements. The Working Group agreed that the application process for CAP164 should be robust enough for transition. Users would apply to switch over to CAP164 arrangements using the enduring application form.

- 8.5 The Working Group considered if any further special arrangements would be required. The general view from the responses and that of Working Group members was that the volume of projects actually able to come forward would be relatively small and therefore should not require additional processes. The Working Group acknowledges that the TOs are reviewing local connection issues in response to the suite of transmission access proposals and understands the STC committee would bring forward any revised arrangements through STC governance. If a large volume of applications come forward the Transmission Licensees may need to apply to the Authority for an extension to the offer period Under Licence Condition C8 paragraph 5.

- 8.6 Implementation of the WGAA would require the development of IS system and changes to charging arrangements that are not expected to be available until April 2010.

- 8.7 For CAP164 WGAA, National Grid proposes that implementation should be 1st April 2010, subject to receiving an Authority decision by 30th June 2009, and IS changes proceeding before that as discussed below. If this decision date is not met then the implementation date will be delayed by the same length of time. A decision beyond this time would also have consequences for charging, tariff setting and accurate revenue recovery. Respondents to the Working Group consultation supported SO Release supported the implementation date.
- 8.8 The Working Group acknowledged the implication of National Grid IS developments discussed in section 7 above. If National Grid IS work does not proceed as discussed in section 7 the implementation date would need to be delayed beyond April 2010.
- 8.9 The Working Group agreed that a transitional assessment period of 6 months was appropriate for implementation of CAP164 WGAA. Working back from the implementation date, for an implementation date of 1st April 2010, the transitional assessment period would start on 1st October 2009. Therefore that means that all applications from Users would need to be submitted on or before 30 September 2009. Allowing for a 2 month application window in the transition period, Users could submit applications from 1st August 2009. To assist the Users National Grid will publish the application forms in mid July. This indicates that for an implementation date of April 2010 the Authority must make a decision by 30th June, allowing 2 week for National Grid to publish transition application information.
- 8.10 All subsequent application windows will close on 6 monthly anniversaries of the implementation date, and National Grid will take 3 months to assess (in line with licence condition C8) these applications.
- 8.11 In the transition period all offers will be issued by the implementation date. National Grid, where practical, will issue offers up to one month before the implementation date (the offer closure date will be remain 3 months from the implementation date irrespective of when the offer is issued). Given the nature of local works it is considered unlikely that offers will be interactive, but where they are these will be issued on the same day to all relevant Users.
- 8.12 If the Authority makes a decision prior to June 30th 2009 the implementation date will remain 1st April 2010.
- 8.13 If the Authority make a decision later than June 30th 2009 the timetable described in 8.9 above would slip by the same amount of time.

9.0 IMPACT ON THE CUSC

- 9.1 This amendment will require changes to sections 2, 3, 6 & 11. There may be a number of minor changes to other sections of the CUSC. It is also envisaged there will be a number of changes to the exhibits and schedules to the CUSC, including those relating to connection applications and offers and construction agreements.
- 9.2 The text required to give effect to the Original Proposal and the WGAA is contained as of Annex 1 of this document.

10.0 IMPACT ON INDUSTRY DOCUMENTS

Impact on Core Industry Documents

- 10.1 Grid Code: This amendment can be implemented without requiring users to contravene existing obligations under the Grid Code. A further review is being carried out and any changes will be indicated in the Company consultation.
- 10.2 STC: New processes and reconfiguration of the outage plan to accommodate early local connection. Most of the new generation connecting under CAP164 is likely to be in Scotland, this will provide significant challenges for the Scottish TOs (especially in building local connections within 3 or 4 years).
- 10.3 The Working Group understands that the STC Committee are currently reviewing the impact and are expected to bring forward proposals to accommodate changes to the access regime shortly after submission of the CUSC amendments proposals to the Authority. The initial transitional period would require extension to timescales in the STC and STCPs.
- 10.4 The STC committee is assessing the implications for enduring processes and is expected to bring forward any consequential changes in early 2009, following STC governance processes.
- 10.5 BSC: None envisaged by the Working Group. A respondent to the Working Group consultation expressed the view that an information imbalance charge should be introduced as part of CAP164. The Working Group believed that introducing an information imbalance charge was a more fundamental issue relating to the integration of new technologies and not an issue relating directly to CAP164.

Impact on other Industry Documents

- 10.6 SQSS: Generation connecting before the wider transmission system was in place would mean the system was non-compliant with the GB SQSS as currently drafted. The current review of the GB SQSS needs to address this issue. Time limited derogations could be put in place to take account of this. SQSS is being reviewed to establish impacts, not expected to delay implementation.
- 10.7 Charging methodologies: The Original amendment proposal may have some implications on charging arrangements, principally on how plant that is connected prior to wider reinforcements is treated in the TNUoS model. Changes are being discussed through the charging methodologies governance arrangements and are expected to be implemented by April 2010. National grid has already issued a pre consultation, GB ECM14.
- 10.8 Charging methodologies: The WGAA provides connection prior wider works being completed. The suggested consequential change to charging arrangements is that a new tariff is developed and applied for the period between connection and a fixed date (the forecast date for completion of wider works). The new tariff would be set ex ante (in the offer) to reflect the forecast increase in operational costs. Prior to the fixed date the connectee would not pay wider TNUoS, following the fixed date the connectee would stop paying the new charge and revert to wider TNUoS charging. From connection the connectee would, pay local charges and contribute to the residual. National Grid expect to issue a pre consultation covering charging

issues in relation to CAP164 WGAA in January 2009, for an implementation in April 2010, consistent with the other charging changes.

- 10.9 Transmission Licence: Within this report the possible implications on revenue flows and incentives has been identified. These are mainly transmission licence issues rather CUSC. National Grid is reviewing the possible implications for the transmission licence and will contact Ofgem directly to discuss these and agreeing an appropriate way of taking any changes forward, particular with respect to facilitating short term revenue flows through Balancing Services Use of System charges. National Grid expects that SO incentives would be taken forward as part of BSIS scheme developments, TO incentives would need to be discussed separately. These arrangements could be implemented by April 2010 providing initial discussion and development is not delayed until the final decision.
- 10.10 The WGAA has a built in transition period of 6 months. National Grid will discuss any impact on Licence Condition C8 with the Authority. For the Original proposal there is no explicit transition period, if a large volume of applications are received on day 1 then National Grid will discuss the implications on Licence Condition C8 timescales with the Authority.

11.0 WORKING GROUP RECOMMENDATION

- 11.1 The Working Group believes its Terms of Reference have been completed and CAP164 has been fully considered. At the final meeting on 18 November 2008 fifteen Working Group members cast votes:

Voting Results	For	Against	Abstain
Original better than Baseline	6	9	0
WGAA better than Baseline	15	0	0

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

Voting Results	For
Original best	3
WGAA best	12

12.0 AMENDMENTS PANEL RECOMMENDATION

- 12.1 The Panel agreed that the Working Group had fulfilled its Terms of Reference. A number of Panel members stated that the report was as complete as possible given the time constraints associated with the wider Transmission Access Review.

- 12.2 At the Panel meeting on 19 December 2008 the Panel voted as follows:

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

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

Voting Results	For
Original best	0
WGAA best	8

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

13.0 NATIONAL GRID RECOMMENDATION

- 13.1 National Grid does not support the Original amendment on the basis that it has not been shown to be justified under the analysis on Carbon costs, irrespective of our view that the costs presented for the early years that we have indicated, in our view, are too low. We also note the other work presented in this area related to CAP148, namely the analysis in CAP 148

report, the Ofgem Impact Assessment and the CEPA analysis. Whilst we note the guidance on assessments with respect to carbon, we are unclear that this extends to limiting changes to the charging methodologies which could otherwise be considered as cost reflective and facilitating competition. In order to pursue the suggest charging arrangements for the Original proposal National Grid would seek explicit assurance that this would not be in breach of the transmission licence objectives, although we would regard the Authority's acceptance of the Original as implicit assurance.

- 13.2 In principle National Grid supports the WGAA on the basis that it better facilitates early connection, promoting effective competition; and facilitating more effective use of the GB transmission system efficiently discharging of the licensees obligations imposed under the Act. We recognise that the WGAA has a number of significant implications for the charging methodologies and a number of implications on revenue flows that will need to be considered before the Authority can make a decision.

14.0 INDUSTRY VIEWS AND REPRESENTATIONS

14.1 Responses to the Working Group Consultation

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

Reference	Company	Supportive
CAP164-WGC-01	Renewable Energy Systems	Yes
CAP164-WGC-02	Scottish Power	Yes
CAP164-WGC-03	Welsh Power	None provided
CAP164-WGC-04	Scottish and Southern	Yes
CAP164-WGC-05	International Power	Yes
CAP164-WGC-06	Fairwind	Yes
CAP164-WGC-07	E.ON	No
CAP164-WGC-08	EDF Energy	No
CAP164-WGC-09	Drax Power	Yes
CAP164-WGC-10	Centrica	No
CAP164-WGC-11	BWEA	Yes
CAP164-WGC-12	British Energy	No
CAP164-WGC-13	Renewable Energy Association	Yes
CAP164-WGC-14	Nuclear Decommissioning Authority	No
CAP164-WGC-15	Wind Energy	Yes
CAP164-WGC-16	Gas de France ESS (UK) ltd	No
CAP164-WGC-17	Highland and Islands Partnership	Yes
CAP164-WGC-18	Scottish Renewables	Yes
CAP164-WGC-19	ESB International	Yes
CAP164-WGC-20	RWE	No
CAP164-WGC-21	Immingham CHP	Yes
CAP164-WGC-22	AEP	No

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

Reference	Company	Details of the proposal	Working Group Comments
CAP164-WGCR-01	SSE	The proposal seeks to mitigate the additional costs of connect and manage on third parties, yet provide firm access at an ex ante price in fixed timescales.	The Working Group developed the request into the WGAA.

14.2 Views of Core Industry Document Owners

14.2.1 National Grid has been in contact with the directly affected code owners discussed in this report. The most significant of these is the STC. A representative of the STC attended the Working Group as an observer and the STCC are considering the necessary changes.

14.2.2 Other Panels received the consultations and have made no formal representations to the Working Group consultation.

14.3 Company Consultation

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

Reference	Company	Comments
CAP164-CR-01	AEP	Concern about the timescales and the cost benefit analysis. General support that it should, in theory, enable connection of additional generation. The costs associated CAP164 is of concern. Tentative support for the WGAA, subject to further work on charging methodologies and revenue flows.
CAP164-CR-02	British Energy	Support the concept of connect and manage, however do not support CAP164 Original due to the socialisation of the increased constraint costs. The WGAA provides a better balance between socialised costs and targeted costs. In principle support the WGAA. Robust charging arrangements should be in place prior to implementation of CAP164.
CAP164-CR-03	British Wind Energy Association	Refer to the previous responses to the Working Group consultation. In addition, BWEA is supportive of the WGAA going forward.
CAP164-CR-04	Centrica Energy	Concern over the assessment process, timescales, interaction of proposals and general depth of analysis. The Original would facilitate timelier connection, but at a cost. So overall the Original does not better

		meet the CUSC objectives. Difficult to judge the WGAA against the CUSC objectives given the charging and revenue implications still to be discussed, and the lack time available for development and analysis. Support the WGAA as the most credible option.
CAP164-CR-05	Drax Power Limited	Most useful amendment in helping new Users gain access. CAP164 would provide greater stability for most Users. Constraint costs maybe problematic, the Working Group has attempted to address this in the WGAA. Consider CAP164 in combination with CAP165 WGAA3 to improve investment signals.
CAP164-CR-06	E.ON UK plc	Oppose the Original. Cross subsidies are detrimental to competition and the efficient operation of the market. The charging associated with the WGAA is crucial. Support for the principle of an ex ante fixed charge. The influence of planning will still be crucial going forward. Support for the WGAA, subject to correct charging arrangements being in place.
CAP164-CR-07	International Power First Hydro	Carry forward comments from response to the Working Group Report. Support the WGAA in preference to the Original.
CAP164-CR-08	Immingham CHP LLP	Views unchanged from the Working Group consultation response. It is essential that existing rights are respected. The process for such a profound change is inadequate, necessitating the need for a full Impact Assessment to be carried out. CAP164 offers the best short term option for meeting the Government's objectives, optimising existing capacity and expediting the queue. The report understates a number of important benefits, including greater investment certainty.
CAP164-CR-09	InterGen	The time to assess and respond does not reflect the possible impact of the proposals. InterGen does not support socialisation of constraint costs. Support for the WGAA. Concern that CAP164 will not deliver the required investment in generation alone and that CAP150 has not had sufficient time deliver benefits.
CAP164-CR-10	REA	Views remain the same as provided in response to the Working Group consultation. Support CAP164 as the only option able to meet the Government's targets. The cost benefit analysis should not be the final arbiter. CAP164 should not facilitate low carbon generation constraining off low carbon generation. Additional TNUoS payments should be factored into the cost benefit. Both the Original and the WGAA better meet the CUSC objectives, but the Original is best.
CAP164-CR-11	Rio Tinto Alcan	Concerned that the proposals may affect property rights. Unique nature of operations justifies different treatment.

CAP164-CR-12	Scottish and Southern Energy	Support for both the Original and WGAA. The constraint approach in the WGAA is an enhancement. Lament over the level of analysis on usage, which would support a cost benefit analysis and better enable full assessment, also that Post Implementation Evaluation has not been sets out. CAP164 provides a strong investment signal. Concerned about the potential perverse outcome due to the treatment of negative zones and the Working Groups assessment in this area. Concern that permitting implementation expenditure prior to a decision is 'tantamount to fettering the Authority's discretion'. Further work and analysis is required on the interaction with other access products.
CAP164-CR-13	Scottish Power	Support for the WGAA, in particular for timely, firm access dates to connecting generators. The estimate of uptake in the Working Group assessment is optimistic. The WGAA misses the option of the developer offering constraint mitigation options for a lower ex-ante cost.
CAP164-CR-14	Welsh Power	Do not support the Original, but do support the WGAA. The WGAA should be further developed, focusing on the charging and revenue flows.
CAP164-CR-15	ESB International	Supports for the WGAA, but not Original on account of unknowns or uncertainties around increased operational cost. We agree with that the definition of 'local' should be consistent with GB ECM11.

15.4 Comments on the Draft Amendment Report

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

ANNEX 1 – PROPOSED LEGAL TEXT TO MODIFY THE CUSC

CAP 164 Summary Sheet of Proposed Amendments

1. Overview of Changes

- 1.1 The changes in the legal drafting that are being proposed to implement CAP 164 vary depending on whether the original amendment proposal or WGAA proposal is approved.
- 1.2 The original CAP164 proposal refers to connection/use of system applications on the basis of a "Firm Use of System Date", the WGAA proposal refers to connection/use of system application on the basis of "Interim TEC Arrangements".
- 1.3 The changes for both essentially consist in amending the provisions of some of the Exhibits to the CUSC, in particular Schedule 2 Exhibit 3 (Construction Agreement) and the various application forms and offer letters. The changes that are being proposed to implement "Connect and Manage" are not highlighted in any colour.
- 1.4 If the CAP 164 original or Working Group Alternative the existing Construction Agreement(s) in Schedule 2 Exhibit 3 will be renumbered as Part 1 , Part 2 etc and this new Construction Agreement given the next consecutive reference and the CUSC Contents Page amended accordingly.
- 1.5 In summary the drafting consists of changes to:

Original

1. CUSC Section 11 (by summary)
2. Schedule 2 Exhibit 1 (BCA) (by summary)
3. Schedule 2 Exhibit 1 (BEGA) (by summary)
4. Schedule 2 Exhibit 3 Part X (Construction Agreement) clean¹
5. Exhibit B (BCA Application) by (by summary)
6. Exhibit C (BCA Offer) (by summary)
7. Exhibit D (BEGA Application) (by summary)
14. Exhibit E (BEGA Offer) (by summary)

WG Alternative Amendment

1. CUSC Section 2 (by summary)
2. CUSC Section 3 (by summary)
3. CUSC Section 6 (by summary)
4. CUSC Section 9 (by summary)

¹ A reline copy against the existing version has also been placed on the CUSC amendment web site for information only.

5. CUSC Section 10 (transitional provisions)
6. CUSC Section 11 (by summary)
7. Schedule 2 Exhibit 1 (BCA) by redline
8. Schedule 2 Exhibit 1 (BEGA) by redline
9. Schedule 2 Exhibit 3 (Construction Agreement) clean (as new exhibit)¹
10. Exhibit B (BCA Application) by redline
11. Exhibit C (BCA Offer) by redline
12. Exhibit D (BEGA Application) by redline
13. Exhibit E (BEGA Offer) by redline

Part A - Text to give effect to the Original Proposed Amendment

**Proposed Amendments to CUSC Section 11 (Definitions) under
CAP 164 (Connect and Manage) (Original)**

<p>“Firm Use of System Date Arrangements”</p>	<p>an Offer where Use of System by Transmission Entry Capacity is granted by reference to specified date and which can only be revised in limited circumstances and prior to completion of all Wider Transmission Reinforcement Works.</p>
<p>“Firm Use of System Date”</p>	<p>the date from which a user shall be entitled to Use of System pursuant to a an Offer made in response to a Firm Use of System Date Application;</p>
<p>“Firm Use of System Date Application”</p>	<p>where an applicant for connection and Use of System requests, as provided for in the Connection Application and Use of System Application for a Bilateral Embedded Generation Agreement that Use of System is made available by reference to a Firm Use of System Date;</p>
<p>Wider Transmission Reinforcement Works</p>	<p>in relation to a particular User, as defined in the Construction Agreement associated with the Firm Use of System Date Arrangements.</p>

**Proposed Amendments to CUSC Sch 2 Exhibit 1 (BCA) under
CAP 164 (Connect and Manage) (Original)**

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

New Sentence at end of recital B

[\[This Offer is made pursuant to the Firm Use of System Date Arrangements\].](#)

**Proposed Amendments to CUSC Sch 2 Exhibit 2 (BEGA) under
CAP 164 (Connect and Manage) (Original)**

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

New Sentence at end of recital B

[\[This Offer is made pursuant to the Firm Use of System Date Arrangements\].](#)

SCHEDULE 2 EXHIBIT 3 Part X

[Construction Agreement for use with Firm Use of System Date]

INDICATIVE

DATED []

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

and

[] (2)

THE CONNECTION AND USE OF SYSTEM CODE

CONSTRUCTION AGREEMENT

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	Credit Requirements
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
Appendix K	Liquidated Damages

CUSC v1.5

Appendix L Independent Engineer

Appendix M Security Arrangements

Appendix N Third Party Works

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 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. The offer is made on the basis of a **Firm Use of System Date**.
- (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**.
- (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**.

“Access Date”	means the date four calendar years from the date of this Construction Agreement or such later date as may be fixed as the such date in accordance with Clause 2.18 or Clause 3.3.
“Backstop Date”	the date specified as such in the Construction Programme .
“Bi-annual Estimate”	the estimate of Final Sums provided by The Company to the User in accordance with Clause 9.2.1 such estimate being in the form attached at Appendix M.
“Bilateral Connection Agreement”	the Bilateral Connection Agreement entered into between the parties on even date herewith.
“Bilateral Embedded Generation Agreement”	the Bilateral Embedded Generation Agreement entered into between the parties on even date herewith.

"Charging Date"

means the later of:

(a) the day after the **Completion Date**;
or

(b) the **Access Date**..the

"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** 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"

means:

(a) the date specified as such in the **Construction Programme** being the date upon which the **Construction**

Works are **Commissioned** and the **Third Party Works** are completed; or

(b) 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 **[14]** days after the date of such certification, provided that the **LCN Transmission Reinforcement Works** are **Commissioned** and **One Off Works** and **Third Party Works** are completed as at that date. In the event that the **LCN Transmission Reinforcement Works** are not so **Commissioned** and/or the **LCN One Off Works** and/or **Third Party Works** are not so completed the date on which they are **Commissioned** and/or completed as appropriate,

as amended in terms of this **Construction Agreement**.

"Connected Planning Data"

data required pursuant to the **Planning Code** 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 **Works**:-

- (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 **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 , LCN Transmission Reinforcement Works and LCN 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.
"Final Sums"	the amount payable by the User on termination of this Construction Agreement being the aggregate from time to time and for the time being 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** and **Wider 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** and **Wider Construction Works** provided it is negotiated on an arms length basis (including any such arising under the **STC**);
- (4) 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
- (5) 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 **Final Sums** shall be referred to arbitration in accordance with the **Dispute Resolution Procedure**.

“Force Majeure”	shall have the meaning ascribed to it in the CUSC except that, for the avoidance of doubt, any delay in the User obtaining its Power Station Consents shall not constitute an event of Force Majeure .
“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 One Off Works”	the works described in Appendix B1 Part 1 to this Construction Agreement .
“Power Station Consent”	means the consent for the User’s Power Station granted under Section 36 of the Electricity Act or planning permission granted under the Town and Country Planning Act 1990 in England and Wales or the Town and Country Planning (Scotland) Act 1997 in Scotland.

“Secured Amount Statement”	the statement provided by The Company to the User in accordance with Clause 9.2.2.
“Term”	the term of this Construction Agreement 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 The Company and the User to enable it to provide or as a consequence of the connection to and/or use of the GB Transmission System by the User as specified in Appendix N.
“Transmission Connection Assets”	the assets specified in Appendix A to the Bilateral Connection Agreement .
“Transmission Connection Asset Works”	the works necessary for construction and installation of the Transmission Connection Assets at the Connection Site specified in Appendix G to this Construction Agreement .
“LCN Transmission Reinforcement Works”	means those works specified in Appendix H Part 1 to this Construction Agreement .

“User’s Completion Date”	the date specified in the Construction Agreement for completion of the User’s Works .
“User’s Works”	those works necessary for installation of the User’s Equipment which are specified in Appendix I to this Construction Agreement .
“Wider Construction Works”	the Wider Transmission Reinforcement Works and Wider 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 .
“Wider One Off Works”	the works described in Appendix B1 Part 2 to this Construction Agreement .
“Wider Transmission Reinforcement Works”	those works which in the reasonable opinion of The Company are necessary to extend or reinforce the GB Transmission System as a consequence of (but not prior to) the operation of the User’s Equipment at the Completion Date and which are specified in Appendix H Part 2.
“Works”	the Construction Works and the User’s Works .

Users in the capacity of a Directly Connected Power Station or Embedded Power Station (other than those who are a BELLA) insert the following

[“Capacity Reduction Charge”	Final Sums and as such subject to the provisions of Clauses [9.2 and 9.3 -if user meets credit rating] [9.6 and 9.7 - if user does not meet credit rating] of this Construction Agreement except that the Final Sums will be assessed by reference to those elements of the Construction Works and Wider
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“Notice of Intent”	Construction Works no longer required as a result of a Notice of Reduction taking effect rather than on termination of this Construction Agreement . 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 Transmission Entry Capacity ..
“Preliminary Request”	the request issued by The Company pursuant to Clause 7.4.1.
“Reduction Fee”	the fee payable by the User to The Company 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 Charging Statements as payable on a payment of actual costs basis in respect of a Modification Application .]

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 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** excluding any costs associated with the works specified in Part 2 of Appendix H.

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 feuhold 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 Prior to the commencement of the **Transmission Connection Asset Works** the **User** shall have the right to terminate this **Construction Agreement** 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.

- 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 **Construction 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 **LCN 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 Part 1 (**LCN Transmission Reinforcement Works**) and N (**Third Party Works**)] to this **Construction Agreement** and consequently 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 **Construction 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 Trade and Industry 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 **LCN 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 this **Construction Agreement**.]

2.14 [It is hereby agreed and declared for the purposes of the Construction (Design and Management) Regulations 1994 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** 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 For the avoidance of doubt **The Company** shall have no obligations to the **User** in respect of the undertaking of or completion of the **Wider Transmission Reinforcement Works** but to the extent that such works are undertaken prior to the **Charging Date** [**The Company** shall be entitled to include them in the **Bi-annual Estimate** and **Secured Amount Statement** and] sums associated with them shall form part of any **Final Sums** due on termination of this **Construction Agreement** on or before the **Charging Date**.

2.18 Access Date

Except as expressly provided for in this **Construction Agreement** the **Completion Date** and **Access Date** can only be changed by agreement between **The Company** and the **User**. The **User** shall be entitled to request such change and such change shall be requested by use of the **Modification Application** and shall follow the process set out in **CUSC** 6.9 but shall not be a **Modification** for the purposes of the **CUSC** and the **User** acknowledges that **The Company** will not agree and so shall not be obliged to offer an agreement to vary or enter into the same where such change would adversely impact on another user.

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** and/or the **User's 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.

- 3.3 If at any time prior to the [**Completion Date**] **The Company** believes by reason of an event of **Force Majeure**, that the completion of the **Wider Transmission Reinforcement Works** shall be more than four years from the date of this **Construction Agreement** **The Company** shall be entitled to have such later date fixed as the **Access Date** as may be fair and reasonable in the circumstances provided that it shall have notified the **User** in writing of such 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 revised **Access Date**. In the event of a dispute between the parties over what is the fair and reasonable new date to be fixed in the circumstances this shall be promptly referred to and determined by the **Independent Engineer**.

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** shall be **Commissioned** and (2) the **Third Party Works** shall be completed **The Company** shall forthwith notify the **User** in writing that the **Connection Site** shall become **Operational**.
- 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 **LCN 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**. 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 Not Used
- 7.4 **Transmission Entry Capacity Reduction**
- 7.4.1 If, at any time prior to the **Charging 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 **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 **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 **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 **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 **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 **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 **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 **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 **Capacity Reduction Charge** and **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**.

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 Appendices F1 to F5 to the **Bilateral Connection Agreement** .

9. CREDIT REQUIREMENTS

Alternate provisions apply depending whether or not the **User** does (9A) or does not (9B) meet **The Company's** required credit rating on signing the

Construction Agreement. Details of the credit requirements are set out in the **CUSC**.

9A1 PROVISION OF SECURITY

9A.1.1 The User shall as soon as possible after execution of this **Construction Agreement** and in any event no later than one (1) month after the date of such execution confirm to **The Company** whether it meets **The Company Credit Rating**. Thereafter not less than 75 days before 1 April and 1 October in each year until (subject to Clause 9A.4) 28 days after the **Charging Date** the **User** shall confirm it meets **The Company Credit Rating** to **The Company** (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 ceasing to meet **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.

9A.1.2 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 Clause 9A.1.1 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 Clause 9A.1.4 hereof.

9A.1.3 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 Clause 9A.1.2 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 meeting **The Company Credit Rating** for at least 6 months; or
- (vi) the **User** has not obtained from Standard and Poor's within 30 days of the written notification by **The Company** under Clause 9A.1.2(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 Clause 9A.1.4.

9A.1.4 The **User** shall within 21 days of the giving of a notice under Clause 9A.1.3 or within 30 days of the **User** confirming to **The Company** under Clause 9A.1.2(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 to **The Company** arising in the event of, or which have arisen prior to, termination of this **Construction Agreement**. The security to be provided 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 as appropriate. Such security shall be provided by way of:-

- (i) an irrevocable on demand standby **Letter of Credit** or guarantee; or
- (ii) cash held in escrow in a **Bank Account**; or
- (iii) any other form included in **The Company's** then current policy and procedure

such letter of credit or guarantee or security to be in a form agreed in writing by **The Company** and to be given by a **Qualifying Bank**, or **Qualifying Company**. Cash deposited in escrow shall be deposited with a **Qualifying Bank**. The choice of such security shall be at the discretion of the **User**.

9A.1.5 The **User** shall in addition to providing the requisite security enter into an agreement with **The Company**, which shall be supplemental to this **Construction Agreement** (the "Amending Agreement"). The **Amending Agreement** shall be in such form as **The Company** shall reasonably require and shall contain such provisions in relation to the **User's** obligations to provide and maintain security as shall be consequential upon the requirement for security having arisen, in line with **The Company's** then current provisions to the like effect in its agreements with other parties. The **Amending Agreement** shall relate to the procedures required in obtaining and maintaining the security and shall not alter or amend the amount of security required in terms of this **Construction Agreement**.

9A.1.6 In the event of **The Company's** credit requirements being reviewed at any time **The Company** shall advise the **User** in writing of the new credit requirements and the **User** shall within 30 days of such notification confirm in writing to **The Company** whether it wishes to enter into an **Amending Agreement** to reflect the new credit requirements. Thereafter if the **User** has confirmed it wishes to accept the new credit requirements **The Company** and the **User** shall within 30 days of such notification enter into an **Amending Agreement**.

9A.1.7 In the event that the facts or circumstances giving rise to the obligations of the **User** to provide the security have ceased, then **The Company** shall release the security and provisions to that effect shall be included in the **Amending Agreement**.

Final Sums

9A.2 Within 60 days of the date of termination of this **Construction Agreement** **The Company** shall:

- (a) furnish the **User** with a further 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.

9A.3.1 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.

9A.3.2 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.

9A.3.3 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.

9A.4 The obligations to provide security under this Clause 9A shall continue until either all sums due under this **Construction Agreement** have been paid in full or security arrangements have been put in place by the **User** under the **Bilateral Connection Agreement** in accordance with Section 2 Part III of the **CUSC**. Until such time as the security arrangements are put in place in accordance with Section 2 Part III of the **CUSC** **The Company** shall be entitled to call upon the security put in place under the terms of this **Construction Agreement** for payment of **Termination Amounts** when due under the provisions of the **CUSC**.

Or

9B.1 Provision of Security

9B.1.1 The **User** hereby agrees that it shall forthwith upon the signing of this **Construction Agreement** provide to **The Company** or procure the provision to **The Company** of, and the **User** shall until (subject to Clause 9B.8) 28 days after the **Charging Date** (unless and until this **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) 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 Appendix M hereto to provide security for the **User's** obligation to pay **The Company** any and all sums specified by **The Company** in accordance with Clause 9B.2 of this **Construction Agreement** as requiring to be secured in respect of:-

(a)

Final Sums.

9B.2 Provision of **Bi-annual Estimate** and **Secured Amount Statement**

9B.2.1 **The Company** shall provide to the **User** an estimate ("the **Bi-annual Estimate**") in substantially the form set out in Part 2 of Appendix M to this **Construction Agreement** and 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:-

(a) forthwith on and with effect from the signing of this **Construction Agreement**, in respect of the period from and including the day of

signing of this **Construction Agreement** until the next following 31st March or 30th September (whichever shall first occur); and

- (b) not less than 75 (seventy five) days (or if such day is not a Business Day the next following **Business Day**) prior to each 31st March and 30th September thereafter in respect of the period of six calendar months commencing on the immediately following 1st April or 1st October (as the case may be), until this **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.

9B.2.2 Such **Bi-annual Estimate** shall be accompanied by a statement (in the form of the **Secured Amount Statement** set out in Part 3 of Appendix M to this **Construction Agreement**) ("**Secured Amount Statement**") specifying the aggregate amount to be secured at the beginning of and throughout each such period.

9B.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 six calendar month 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 six calendar month period. Notwithstanding the foregoing, if **The Company** shall provide the **User** with any **Bi-annual Estimate** and **Secured Amount Statement** later than the date specified in Clause 9B.2.1 of this **Construction Agreement**, then the following shall apply. The **User** shall within 30 (thirty) days of receipt of the said **Secured Amount Statement** procure that to the extent that the amount in respect of which security has been or is to be provided pursuant to this Clause 9B.2.3 in respect of the relevant period ("**the Secured Amount**") falls short of the amount stated in the **Secured Amount Statement** ("**the Required Amount**") the **Secured Amount** shall be adjusted to the **Required Amount**.

9B.3 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 payment under any of the provisions of this **Construction Agreement**, **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**.

9B.4 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:-

9B.4.1 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

9B.4.2 the fairness and reasonableness of **The Company's** estimate; or

9B.4.3 whether there has been an **Event of Default** (under the **Construction Agreement** or the **CUSC**), or

9B.4.4 the lawfulness or otherwise of any termination or purported termination of this **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 Clause 9B.1 of and Appendix M to this **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.

9B.5 If there shall be any dispute as mentioned in Clause 9B.4 of this **Construction Agreement** the same shall, whether **The Company** shall have terminated this **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 Clauses 9B.4.1 and 9B.4.2 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 Clause 9B.5 shall survive termination) and, in the case of Clauses 9B.4.3 and 9B.4.4 be dealt with by referral to arbitration in accordance with the **Dispute Resolution Procedure**.

Final Sums

9B.6 Within 60 days of the date of termination of this **Construction Agreement** **The Company** shall:

- (a) furnish **the User** with a further 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.

9B.7.1 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.

9B.7.2 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.

9B.7.3 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.

9B.8 The obligations to provide security under this Clause 9 B shall continue until either all sums due under this **Construction Agreement** have been paid in full or security arrangements have been put in place by the **User** under the **Bilateral Connection Agreement** in accordance with Section 2 Part III of the **CUSC**. Until such time as the security arrangements are put in place in accordance with Section 2 Part III of the **CUSC** **The Company** shall be entitled to call upon the security put in place under the terms of this **Construction Agreement** for payment of **Termination Amounts** where due under the provisions of the **CUSC**.

10. EVENT OF DEFAULT

As before 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**, or to enter into the **Amending Agreement** pursuant to Clauses 9A.1 or 10A.3 of this **Construction Agreement**.

10A.2 If having entered into the **Amending Agreement** and having provided security satisfactory to **The Company** pursuant to Clauses 9A.1 and 10A.3 of this **Construction Agreement**.

(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 this **Construction Agreement** as varied by the **Amending Agreement** 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 this **Construction Agreement** as varied by the **Amending Agreement**;

(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** as varied by the **Amending 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;

(c) Any party who may at any time be providing security to **The Company** pursuant to the provisions of this **Construction Agreement** as varied by the **Amending Agreement** 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 its then current policy and procedures and in such amount as **The Company** shall specify to the **User** in the aforesaid notice. The **User** shall if required by **The Company**, in addition to providing the requisite security, within a period of 30 days following the date on which **The Company** gives the **User** such notice enter into an **Amending Agreement**. Such **Amending Agreement** shall contain such provisions in relation to the **User's** obligations to provide and maintain security as shall be consequential upon the requirement for security having arisen and shall be in such form as **The Company** shall reasonably require in line with **The Company's** then current provisions to the like effect in its connection agreements with other parties.

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 Any of the **Events of Default** in Paragraph 5.3.1 of the **CUSC** have occurred and are occurring.

Or

10B Event of Default

Any of the following events shall constitute an **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** (as defined in Appendix M) in favour of **The Company** and **Valid** (as defined in Appendix M) 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 Clauses 9B.1 or 10B.1 of and Appendix M to this **Construction Agreement** 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 Appendix M to this **Construction Agreement**.

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** pursuant to Clauses 9B.1 or 10B.1 of and Appendix M to this **Construction Agreement** fails to pay **The Company** any sum demanded in any Notice of Drawing (as defined in Appendix M) pursuant thereto.

10B.5 Any of the **Events of Default** in Paragraph 5.3.1 of the **CUSC** have occurred and are occurring.

10A.4/

10B.6 Once an **Event of Default** has occurred and is continuing **The Company** may give notice of termination to the **User** whereupon this **Construction Agreement** shall forthwith terminate and **The Company** shall disconnect all the **User's Equipment** at the **Connection Site** and:

11. TERMINATION

11.1 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**.

11.2 The **User** shall be liable forthwith on the date be liable forthwith on the date this **Construction Agreement** so terminates to pay to **The Company** **Final Sums** and shall on termination pay:-

(1)

a sum equal to **The Company's** fair and reasonable estimate of **Final Sums**,

such payment to be made within 14 days of the date of **The Company's** invoice(s) in respect thereof subject to adjustment in respect of **The Company's** estimate of **Final Sums** in accordance with Clause 9A.3.3. or 9B.7.3.

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 provisions of Clause 11 shall apply.
- 12.3 The associated **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**.

16. RESTRICTIVE TRADE PRACTICES ACT

Any restriction or information provision (as each of those terms are defined or construed in Section 43(1) of the Restrictive Trade Practices Act 1976) contained in this **Construction Agreement** shall not take effect or shall cease to have effect:-

- (a) if a copy of this **Construction Agreement** is not provided to the Department of Trade and Industry ("DTI") within 28 days of the date of this **Construction Agreement**; or
- (b) if, within 28 days of the provision of that copy to the DTI, the DTI gives notice of objection to the party providing it.

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

APPENDIX [H]

TRANSMISSION REINFORCEMENT WORKS

PART 1 LCN TRANSMISSION REINFORCEMENT WORKS

Part 2 WIDER TRANSMISSION REINFORCEMENT WORKS

APPENDIX [L]

INDEPENDENT ENGINEER

Company:

Connection site:

Type:

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

APPENDIX [M]

PART 1

SECURITY ARRANGEMENT

1. DEFINITIONS

In this Appendix M, the following terms have the meanings set out next to them:-

“Bi-annual Estimate” means an estimate pursuant to Clause [9B.2.1] of this Construction Agreement of all payments to be made or which may be required to be made by the User in any relevant period, such estimate to be substantially in the form set out in Part 2 of this Appendix M;

“Bank Account” means a separately designated bank account in the name of The Company at such branch of Barclays Bank PLC, or such branch of any other bank, in the City of London as is notified by The Company to the User, bearing interest from (and including) the date of deposit of principal sums to (but excluding) the date of withdrawal of principal sums from such account, mandated for withdrawal of principal solely by The Company against delivery of a Notice of Drawing for the amount demanded therein and mandated for the transfer of any interest accrued to the Bank Account to such bank account as the User may specify;

- “Letter of Credit” means an irrevocable standby letter of credit in a form reasonably satisfactory to The Company but in any case expressed to be governed by the Uniform Customs and Practice for Documentary Credits 1993 Revision ICC Publication No. 500 or such other form as may be reasonably satisfactory to The Company and allowing for partial drawings and providing for the payment to The Company on demand forthwith on and against The Company’s delivery to the issuer thereof of a Notice of Drawing of the amount demanded therein;
- “Notice of Drawing” means a notice of drawing signed by or on behalf of The Company substantially in the form set out in Part 4 of this Appendix M;
- “Performance Bond” means an on first demand without proof or conditions irrevocable performance bond or performance guarantee executed as a deed in a form reasonably satisfactory to The Company but in any case allowing for partial drawings and providing for the payment to The Company on demand forthwith on and against The Company’s delivery to the issuer thereof of a Notice of Drawing of the amount demanded therein;
- “Qualified Bank” means a City of London branch of a bank, its successors and assigns, which has throughout the validity period of the Performance Bond or Letter of Credit it issues in favour of The Company, a rating

of at least A- in Standard and Poor's long term debt rating or A3 in Moody's long term debt rating provided that such bank is not during such validity period put on any credit watch or any similar credit surveillance which gives The Company reasonable cause to doubt that such bank may not be able to maintain the aforesaid rating throughout the validity period and no other event has occurred which gives The Company reasonable cause to have such doubt;

"Qualified Company"

a company which is a public company or a private company within the meaning of section 1(3) of the Companies Act 1985 and which is either :

- (a) a shareholder of the **User** or any holding company of such shareholder-or
- (b) any subsidiary of any such holding company, but only where the subsidiary
 - (i) demonstrates to **The Company's** satisfaction that it has power under its constitution to give a **Performance Bond** other than in respect of its subsidiary;
 - (ii) provides an extract of the minutes of a meeting of its directors recording that the directors have duly concluded that the giving of the **Performance Bond** is likely to promote the success of that subsidiary for the benefit of its members;

(iii) provides certified copies of the authorisation by every holding company of the subsidiary up to and including the holding company of the **User**, of the giving of the **Performance Bond**,

(the expressions “holding company” and “subsidiary” having the respective meanings assigned thereto by section 736, Companies Act 1985 as supplemented by section 144(3), Companies Act 1989) and which has throughout the validity period of the **Performance Bond** it gives in favour of **The Company**, a rating of at least A- in Standard and Poor’s long term debt rating or A3 in Moody’s long term debt rating or such lesser rating which **The Company** may in its absolute discretion allow by prior written notice given pursuant to a resolution of its board of directors for such period and on such terms as such resolution may specify provided that such company is not during such validity period put on any credit watch or any similar credit surveillance procedure which gives **The Company** reasonable cause to doubt that such company may not be able to maintain the aforesaid rating throughout the validity period of the **Performance Bond** and no other event has occurred which gives **The Company** reasonable cause to have such doubt;

“Secured Amount Statement”

means a statement accompanying the Bi-annual Estimate setting out the amount of the User’s Obligation based on figures contained in the Bi-

annual Estimate being the amount for which security shall be provided to The Company pursuant to Clause 9B of this Construction Agreement;

“User’s Obligation” means the User’s obligation to pay under this Construction Agreement:-

(i) Final Sums

“Valid” means valid for payment to be made thereunder against delivery of a Notice of Drawing given within the period stated therein.

2. **SECURITY REQUIREMENT**

The User’s Obligation shall be secured by any one of the following:-

2.1 A Performance Bond or Letter of Credit from a Qualified Bank for the amount stated in the Secured Amount Statement as the estimated amount of the User’s Obligation to be secured, such Performance Bond or Letter of Credit to be Valid for at least the period stated in such Secured Amount Statement and to be renewed periodically where applicable in the manner stated in paragraph 3.3 of this Appendix M; or

2.2 A cash deposit in a Bank Account at least for the amount stated in the Secured Amount Statement as the estimated amount of the User’s Obligation to be secured, such cash deposit to be increased or reduced periodically where applicable in the manner stated in paragraph 3.4 of this Appendix M; or

2.3 A Performance Bond from a Qualified Company for the amount stated in the Secured Amount Statement as the estimated amount of the

User's Obligation to be secured, such Performance Bond to be Valid for at least the period stated in such Secured Amount Statement and to be renewed periodically where applicable in the manner stated in paragraph 3.3 of this Appendix M.

3. **GENERAL PROVISIONS**

- 3.1 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.
- 3.2 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.

3.3 The following provisions shall govern the issuance, renewal and release of the Performance Bond or Letter of Credit:-

3.3.1 The Performance Bond or Letter of Credit shall be Valid initially from the signing of this Construction Agreement at least to and including the following 31st March or 30th September whichever is the earlier date. Such Performance Bond or Letter of Credit shall be for an amount not less than that stated in the Secured Amount Statement as the amount of the User's Obligation to be secured during the period specified in the Secured Amount Statement.

3.3.2 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 next following 31st March or 30th September whichever is the earlier date such Performance Bond or Letter of Credit shall be renewed so as to be Valid for not less than 6 months commencing from the immediately following 1st April or 1st October (as the case may be). Such renewed Performance Bond or Letter of Credit shall be for an amount not less than the amount of the User's Obligation stated in the Secured Amount Statement as the amount to be secured during the period that such renewed Performance Bond or Letter of Credit shall be Valid.

3.3.3 Thereafter, the renewed Performance Bond or Letter of Credit shall be further renewed in like manner every 6 months.

3.4 The following provisions shall govern the maintenance of cash deposits in the Bank Account:-

- 3.4.1 The amount of the cash deposit to be maintained in the Bank Account shall be maintained from the date of this Construction Agreement at least to and including the following 31st March or 30th September, whichever is the earlier date. Such cash deposit shall be in an amount as stated in the Secured Amount Statement as the amount of the User's Obligation to be secured during the period stated in the Secured Amount Statement.
- 3.4.2 If the amount stated in the Secured Amount Statement as the amount of the User's Obligation to be secured from the following 1st April to 30th September or from the following 1st October to 31st March (as the case may be) is an amount greater than the amount then secured, the cash deposit in the Bank Account shall be increased to such greater amount on a date which is 45 days before the following 31st March or 30th September (as the case may be) which immediately precedes the commencement of the relevant above mentioned period.
- 3.4.3 If such amount stated in the Secured Amount Statement 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 next following 31st March or 30th September (as the case may be) ("the Release Date").
- 3.4.4 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.
- 3.4.5 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.

3.5 Notwithstanding any provision aforesaid:-

3.5.1 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 aggregate amount required to be secured pursuant to the Secured Amount Statement for any period specified therein.

3.5.2 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 1st April or 1st October (as the case may be) and committed at least 45 days before the immediately preceding 31st March or 30th September (as the case may be) 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 such immediately preceding 31st March or 30th September (as the case may be).
- (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 such immediately preceding 31st March or 30th September (as the case may be).

3.5.3 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 following 1st April or 1st October (as the case may be). However, where the amount required by the Secured Amount Statement to be secured for any period is less than the amount required to be secured in the preceding period, the substituted security shall not be released until 7 days after the then following 31st March or 30th September (as the case may be).

PART 2

BI-ANNUAL ESTIMATE FOR CONSTRUCTION AGREEMENT
DATED []

Amount due and amount which will
or might fall due for the period
commencing on and including
[] and ending on and
including [] in
respect of which security is
required

1. Final Sums
- [2. One Off Charge]

PART 3

SECURED AMOUNT STATEMENT

CONSTRUCTION AGREEMENT DATED []

Amount in which security is
required for the period
commencing on and including
[] and ending on and
including []

User's Obligation

We hereby certify that the amount to be secured in respect of the User's Obligation is as stated above in respect of the named period.

for and on behalf of
NATIONAL GRID ELECTRICITY TRANSMISSION PLC

Duly authorised officer

PART 4

NOTICE OF DRAWING

To [] Bank/Public Limited Company/Limited

copy to:

[date]

Dear Sirs,

RE: **CONSTRUCTION AGREEMENT DATED []**
PERFORMANCE BOND NO./DATED []/LETTER OF CREDIT NO.
[]/BANK ACCOUNT NO. [] (“THE SECURITY”)

We refer to the above Security in our favour. We hereby demand immediate payment thereunder in the amount of £[].

We require payment to be made by telegraphic transfer to:-

Bank plc

Address:

Sort Code:

Account Name: National Grid Electricity Transmission plc

Account No:

Yours faithfully,

for and on behalf of
NATIONAL GRID ELECTRICITY TRANSMISSION PLC

Duly authorised officer

CUSC v1.5

APPENDIX [N]
THIRD PARTY WORKS

CUSC v1.5

END OF SCHEDULE 2 EXHIBIT 3 Part X

CAP 164 OAP v2 30.11.08

**Proposed Amendments to CUSC Exhibit B (BCA APPLICATION) under
CAP 164 (Connect and Manage) (Original)**

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

New Paragraph at end of Section C (Technical Information)

11. Please confirm if you would like an offer on the basis of the Firm Use of System Date Arrangements

YES/NO

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

.....

.....

.....

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 Exhibit C (BCA Offer) under
CAP 164 (Connect and Manage) (Original)**

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

New Paragraph after paragraph 4

[This Offer is made pursuant to the Firm Use of System Date Arrangements.](#)

Renumbering

Please note that as a result of the proposed amendments the paragraph 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 Exhibit C (BEGA APPLICATION) under
CAP 164 (Connect and Manage) (Original)**

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

New Paragraph at end of Section C (Technical Information)

7. Please confirm if you would like an offer on the basis of the Firm Use of System Date Arrangements

YES/NO

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

.....

.....

.....

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 Exhibit E (BEGA Offer) under
CAP 164 (Connect and Manage) (Original)**

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

New Paragraph at end after paragraph 3

[This Offer is made pursuant to the Firm Use of System Date Arrangements.](#)

Renumbering

Please note that as a result of the proposed amendments the paragraph 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.

Part B - Text to give effect to the Working Group Alternative Amendment

Proposed Amendments to CUSC Section 2 under CAP 164 (Connect and Manage) WGAA

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 2.13.2, now 2.12.2 (New Connection Sites)

1.1.1 ~~1.13.2~~ Without prejudice to Standard Condition C8 of the **Transmission Licence** **The Company** shall make a **Connection Offer** to that **User** as soon as practicable after receipt of the **Connection Application** or, in the case of a Connection Application on the basis of Interim TEC Arrangements, as soon as practicable after closure of the relevant ITEC Application Period and (save where the **Authority** consents to a longer period) in any event not more than 3 months after receipt by **The Company** of the **Connection Application** or, in the case of a Connection Application on the basis of Interim TEC Arrangements, not more than 3 months after closure of the relevant ITEC Application Period.

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 3 under
CAP 164 (Connect and Manage) (WGAA)**

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 3.7.2 (Use of System Applications)

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 or, in the case of a Use of System Application on the basis of Interim TEC Arrangements, as soon as practicable after closure of the relevant ITEC Application Period, 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 or, in the case of a Use of Application on the basis of Interim TEC Arrangements, not more than 3 months after closure of the relevant ITEC Application Period.

Proposed Amendments to CUSC Section 6 under CAP 164 (Connect and Manage) WGAA

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 6.9.2.2 (Modifications)

- 6.9.2.2 **The Company** shall make the **Modification Offer** to that **User** as soon as practicable or, in the case of a Modification Application on the basis of Interim TEC Arrangements, as soon as practicable after closure of the relevant ITEC Application Period, and (save where the **Authority** consents to a longer period) in any event not more than 3 months after receipt by **The Company** of the **Modification Application** or, in the case of a Modification Application on the basis of Interim TEC Arrangements, not more than 3 months after closure of the relevant ITEC Application Period. The **Modification Offer** shall include details of any variations **The Company** proposes to make to the **Bilateral Agreement** which applies to the **Connection Site** in question. During such period **The Company** and the **User** concerned shall discuss in good faith the implication of the proposed **Modifications**.

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 164 (Connect and Manage) WGAA**

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 9.21.2 (Use of System Application)

9.21.2 Without prejudice to Standard Condition C8 of the **Transmission Licence**, **The Company** shall make a **Use of System Offer** to that prospective **User** as soon as practicable after receipt of the **Use of System Application** or, in the case of a Use of System Application on the basis of Interim TEC Arrangements, as soon as practicable after closure of the relevant ITEC Application Period and (save where the **Authority** commits to a longer period) in any event not more than 28 days after receipt by **The Company** or the **Use of System Application** or, in the case of a Use of System Application on the basis of Interim TEC Arrangements, not more than 3 months after closure of the relevant ITEC Application Period.

Old paragraph 9.18.2 (New Connection Sites)

9.18.2 Without prejudice to Standard Condition C8 of the **Transmission Licence** **The Company** shall make a **Connection Offer** to that **User** as soon as practicable after receipt of the **Connection Application** or, in the case of a Connection Application on the basis of Interim TEC Arrangements, as soon as practicable after closure of the relevant ITEC Application Period and (save where the **Authority** consents to a longer period) in any event not more than 3 months after receipt by **The Company** of the **Connection Application** or, in the case of a Connection Application on the basis of Interim TEC Arrangements, not more than 3 months after closure of the relevant ITEC Application Period.

Renumbering

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

CUSC - SECTION 10
TRANSITION ISSUES

CONTENTS

Deleted: Not used, removed on 15th February 2007, dedicated to Transitional Issues

- [Part 1 **Not Used**
- Part 3 **CUSC AMENDMENT PROPOSAL 164**
- Part 3 **Not Used**

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 164** (Connect and Manage).

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 164** (Connect and Manage);
- (b) the term "**Applicants**"; shall mean **Users** (or prospective **Users**) who apply during the **ITEC Transition Period** for connection to and/or use of the **GB Transmission System** on the basis of the **Interim TEC Arrangements**;
- (c) the term "**Application and Offer Amendments**", shall mean those amendments to **CUSC** Schedule 2 Exhibits 1, 2 and 3 and Exhibits B, C, D and E proposed by the **Access Amendment Proposal**;
- (d) the term "**ITEC 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),
- (e) the term "**ITEC Transition Period**", means the period from the **Relevant Date** and ending on and including the day before the **ITEC 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;
- (f) 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**;

- (g) the term **Notified Dates**, shall mean the date as published by **The Company** for the start and closure of the **Transition Interim TEC Application Window**, and being such that it allows a period of six months from that date until the **ITEC Implementation Date**;
- (h) the term “**Relevant Date**” means the day on which the **Access Amendment Proposal** becomes an **Approved Amendment**; and
- (i) the term “**Transition Interim TEC Application Window**” shall mean the period from and until the **Notified Dates**.

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 INTERIM TEC TRANSITION

10.2.1 During the **Interim TEC Transition Application Period**, **Applicants** may make an application to **The Company** for **Use of System** on the basis of the **Interim TEC Arrangements**.

10.2.1 **The Company** shall make **Offers** to the **Applicants** as soon as reasonably practicable after the end of the **Interim TEC Transition Application Period** and in any event by the **ITEC Implementation Date** and such **Offers** shall;

- (a) be assessed on the same basis (apart from the timescale within which **The Company** has to make the

Offer) as if the application had been made after the **ITEC Implementation Date**;

- (b) be made to each **Applicant** as if it had made its application on the last **Business Day** of the **Interim TEC Transition Application Period**,
- (c) be effective from the **ITEC Implementation Date**;
- (d) be capable of acceptance by, the **Applicant** on or after the **ITEC Implementation Date** and remain open for acceptance for a period of three months from the **ITEC Implementation Date**; and
- (e) be in the form of the **CUSC** as amended by the **Application and Offer Amendments**.

10.2.3 Any application received after the closure of the **Interim TEC Transition Application Period** shall be treated as having been received on the **ITEC Implementation Date**.

END OF SECTION 10

**Proposed Amendments to CUSC Section 11 (Definitions) under
CAP 164 (Connect and Manage) (WGAA)**

<p>“Interim TEC Arrangements”</p>	<p>an Offer where Use of System by Transmission Entry Capacity is permitted on completion of the LCN Transmission Reinforcement Works but prior to completion of all Wider Transmission Reinforcement Works.</p>
<p>“Interim TEC Application”</p>	<p>where an applicant for connection and/or Use of System requests, as provided for in the Connection Application and Use of System Application for a Bilateral Embedded Generation Agreement, that Use of System is made available on the basis of the Interim TEC Arrangements;</p>
<p>“ITEC Application Period”</p>	<p>means each consecutive period of 6 months, the first such period starting on the date that is the Implementation Date for CUSC Amendment Proposal 164 (Working Group Alternative Amendment);</p>
<p>“Wider Transmission Reinforcement Works”</p>	<p>in relation to a particular User means those Transmission Reinforcement Works, as defined in the Construction Agreement associated with the Interim TEC Arrangements;</p>

SCHEDULE 2 - EXHIBIT 1

DATED [_____]

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

and

[_____] (2)

THE CONNECTION AND USE OF SYSTEM CODE

BILATERAL CONNECTION AGREEMENT

[FOR A DIRECTLY CONNECTED POWER STATION]

[FOR A DIRECTLY CONNECTED DISTRIBUTION SYSTEM]

[FOR A NON-EMBEDDED CUSTOMER SITE]

[FOR AN INTERCONNECTOR OWNER]

At [_____]

Reference: [_____]

CONTENTS

1. **Definitions, Interpretation and Construction**
 2. **Commencement**
 3. **The Connection Site and Transmission Connection Assets**
 4. **Connection Charges**
 - [5. **Use of System] (*power station only*)**
 6. **Credit Requirements**
 7. **Connection Entry Capacity and Transmission Entry Capacity**
 8. **Compliance with Site Specific Technical Conditions**
 - [9. **Electrical Boundary] (Non Standard Boundary only)**
 - [10. **Restrictions on availability] (power station with Design Variation only)**
 11. **Term**
 12. **Variations**
 13. **General Provisions**
- Appendix A The Connection Site and Transmission Connection Assets**
- Appendix B Connection Charges**
- Appendix C Connection Entry Capacity and Transmission Entry Capacity (Power Stations and Interconnector Owners)**
- Appendix F1 Site Specific Technical Conditions - Agreed Balancing Services**
- Appendix F2 [Not Used]**
- Appendix F3 Site Specific Technical Conditions - Special Automatic Facilities**
- Appendix F4 Site Specific Technical Conditions - Protection and Control Relay Settings - Fault Clearance Times**
- Appendix F5 Site Specific Technical Conditions - Load Shedding Frequency Sensitive Relays**

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

BETWEEN

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

WHEREAS

- (A) Pursuant to the **Transmission Licence**, **The Company** is required to prepare a Connection and Use of System Code (**CUSC**) setting out the terms of the arrangements for connection to and use of the **GB Transmission System** and the provision of certain **Balancing Services**.
- (B) The **User** has applied for [Connection to] [and use of] [Modification of its existing **Connection** to [and use of]] the **GB Transmission System** and pursuant to the **Transmission Licence** **The Company** is required to offer terms in this respect. [\[The offer is made on the basis of the Interim TEC Arrangements.\]](#)
- (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**;

<u>“ITEC Charge”</u>	<u>the charge calculated in accordance with the Statement of the Use of System Charging Methodology on the basis of the £/ kWh figure set out in Appendix BB.</u>
<u>“ITEC Application Period”</u>	<u>the period within which applicants/and or other users can apply for an offer based on Interim TEC Arrangements and in this particular case closing on []</u>
<u>“ITEC Period”</u>	<u>the period between and including the Charging Date and the TEC Charging Date;</u>
<u>“Local Tariff”</u>	<u>that component of the Transmission Network Use of System Charges described as such and calculated in accordance with The Statement of the Use of System Charging Methodology.</u>
<u>“Residual Tariff”</u>	<u>that component of the Transmission Network Use of System Charges as described as such and calculated in accordance with The Statement of the Use of System Charging Methodology.</u>

[“**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

- 3.1** The **Connection Site** and **Transmission Connection Assets** to which this **Bilateral Connection Agreement** relates is 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** shall commence on and **Use of System Charges** shall be payable by the **User** from the [**CUSC Implementation Date**] [or] [**Charging Date.**].

[Interim TEC Arrangements Only

- 5.2** During the ITEC Period the User shall be liable to pay the ITEC Charge and the Local Tariff and Residual Tariff in respect of the Transmission Entry Capacity.

- 5.3** The maximum £/kWh figures and the periods within the ITEC Period to which those figures as at the date of this Bilateral Connection Agreement apply are set out in Appendix BB. The Company shall revise Appendix BB to show the actual £/kWh figure for the ITEC Period as soon as practicable and in any event within [7 months] of closure of the ITEC Application 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 AND TRANSMISSION ENTRY CAPACITY

- 7.1 The **Connection Entry Capacity** in relation to the **Generating Units** and the **Connection Site** and the **Transmission Entry Capacity** in relation to the **Connection Site**, 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 **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 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** against the sum of metered volumes of the **BM Units** set out in Part 3 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

Company: []

Connection Site: []

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>
-------------------	--------------------	---------------------------	-------------

(*) 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~~ 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 BB

ITEC CHARGE/PAYMENT

Company: _____ []

Connection Site: _____ []

Type: _____ []

Part 1 – ITEC Charge

The £kWh and the periods within the ITEC Period to which they relate are as follows:

[£kWh] [from Charging Date to _____]

[£kWh] [period]

Part 2 - Payment

The ITEC Charge shall be invoiced on Friday of each week (or where the Friday is not a Business Day on the first Business Day after this) and shall be paid on or before the date specified in the invoice.

The ITEC Charge shall be reconciled in similar timescales and on the same principles used for Demand related Transmission Network Use of System Charges.

Appendix Reference: []

APPENDIX C (Power Stations)

CONNECTION ENTRY CAPACITY AND TRANSMISSION ENTRY CAPACITY

Company:

Grid Supply Point/Connection Site:

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 Transmission Entry Capacity

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

TEC(MW)	
Power Station	[]

Part 3 BM Units comprising Power Station

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

APPENDIX C (Interconnector Owners)

CONNECTION ENTRY CAPACITY AND TRANSMISSION ENTRY CAPACITY

Company:

Connection Site:

Part 1 Connection Entry Capacity

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

	CEC(MW)
Interconnector	[]

Part 2 Transmission Entry Capacity

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

Interconnector	[]
----------------	-----------

Part 3 BM Units comprising Interconnector

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

Part 4 Figure for the Purposes of CUSC Paragraph 9.6

APPENDIX F1

SITE SPECIFIC TECHNICAL CONDITIONS:

AGREED BALANCING SERVICES

APPENDIX F2

[NOT USED]

APPENDIX F3

SITE SPECIFIC TECHNICAL CONDITIONS:

SPECIAL AUTOMATIC FACILITIES

APPENDIX F4

SITE SPECIFIC TECHNICAL CONDITIONS:

PROTECTION AND CONTROL RELAY SETTINGS

FAULT CLEARANCE TIMES

APPENDIX F5

SITE SPECIFIC TECHNICAL CONDITIONS:

LOAD SHEDDING FREQUENCY SENSITIVE RELAYS

END OF SCHEDULE 2 - EXHIBIT 1

SCHEDULE 2 - EXHIBIT 2

DATED [_____]

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

and

[_____] (2)

THE CONNECTION AND USE OF SYSTEM CODE

BILATERAL EMBEDDED GENERATION AGREEMENT

[USE OF SYSTEM FOR AN EMBEDDED POWER STATION]

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

[DISTRIBUTION INTERCONNECTOR OWNER]

At [_____]

Reference: [_____]

CONTENTS

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

Appendix A The Site of Connection

Appendix B Charges and Payment

Appendix C Transmission Entry Capacity

Appendix F1 Site Specific Technical Conditions – Balancing Services

Appendix F2 [Not Used]

Appendix F3 Site Specific Technical Conditions - Special Automatic Facilities

Appendix F4 Site Specific Technical Conditions Protection and Control Relay Settings, Fault Clearance Times

Appendix F5 Site Specific Technical Conditions - Other

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

BETWEEN

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

WHEREAS

- (A) Pursuant to the **Transmission Licence**, **The Company** is required to prepare a Connection and Use of System Code (**CUSC**) setting out the terms of the arrangements for connection to and use of the **GB Transmission System** and the provision of certain **Balancing Services**.
- (B) The **User** has applied for use of the **GB Transmission System** and pursuant to the **Transmission Licence** **The Company** is required to offer terms for use of system. [\[The offer is made on the basis of the Interim TEC Arrangements\].](#)
- (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*)]

<u>[Interim TEC Arrangements Only</u>	
<u>“Charging Date”</u>	<u>as defined in the Construction Agreement.</u>
<u>“ITEC Charge”</u>	<u>the charge calculated in accordance with the Statement of the Use of System Charging Methodology on the basis of the £/kWh figure set out in Appendix BB.</u>
<u>“ITEC Application Period”</u>	<u>the period within which applicants/and or other users can apply for an offer based on Interim TEC Arrangements and in this particular case closing on []</u>

<u>“ITEC Period”</u>	<u>the period between and including the Charging Date and the TEC Charging Date;</u>
<u>“Local Tariff”</u>	<u>that component of the Transmission Network Use of System Charges described as such and calculated in accordance with The Statement of the Use of System Charging Methodology.</u>
<u>“Residual Tariff”</u>	<u>that component of the Transmission Network Use of System Charges as described as such and calculated in accordance with The Statement of the Use of System Charging Methodology.</u>

2. COMMENCEMENT

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

3. THE SITE OF CONNECTION TO THE DISTRIBUTION SYSTEM

The site of **Connection** of the **Embedded Power Station** [**Distribution Interconnector**] to the **Distribution System** to which 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 [].

5. USE OF SYSTEM

5.1 The right to use the **GB Transmission System at the Node** shall commence on and **Use of System Charges** shall be payable by the **User** from the ~~date hereof.~~ **Charging Date.**

5.2 During the ITEC Period the User shall be liable to pay the ITEC Charge and the Local Tariff and Residual Tariff in respect of the Transmission Entry Capacity.

5.2 The maximum £/kWh figures and the periods within the ITEC Period to which those figures as at the date of this Bilateral Embedded Generation Agreement apply are set out in Appendix BB. The Company shall revise Appendix BB to show the actual £/kWh figure for the ITEC Period as soon as practicable and in any event within [7 months] of closure of the ITEC Application 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 **Transmission Entry Capacity** of [each of the] site[s] of **Connection** 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 **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** 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

1. SITE[s] OF CONNECTION

Company :

Site[s] of Connection :

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 BB

ITEC CHARGE/PAYMENT

Company: _____ []

Connection Site: _____ []

Type: _____ []

Part 1 – ITEC Charge

The £kWh and the periods within the ITEC Period to which they relate are as follows:

[£kWh] [from Charging Date to _____]

[£kWh] [period]

Part 2 - Payment

The ITEC Charge shall be invoiced on Friday of each week (or where the Friday is not a Business Day on the first Business Day after this) and shall be paid on or before the date specified in the invoice.

The ITEC Charge shall be reconciled in similar timescales and on the same principles used for Demand related Transmission Network Use of System Charges.

Appendix Reference: []

APPENDIX C

TRANSMISSION ENTRY CAPACITY

Part 1 Transmission Entry Capacity

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

	TEC(MW)
Power Station	[]

Part 2 BM Units comprising Power Station

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

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 (Construction Agreement for use with the Interim TEC Arrangements)

INDICATIVE

DATED []

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

and

[] (2)

THE CONNECTION AND USE OF SYSTEM CODE

CONSTRUCTION AGREEMENT

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	Credit Requirements
10	Event of Default
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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
Appendix K	Liquidated Damages

CUSC v1.5

Appendix L Independent Engineer

Appendix M Security Arrangements

Appendix N Third Party Works

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 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 . The offer is made on the basis of the **Interim TEC Arrangements**.
- (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**.
- (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**.

“Backstop Date”	the date described as such in the Construction Programme .
“Bilateral Connection Agreement”	the Bilateral Connection Agreement entered into between the parties on even date herewith.
“Bilateral Embedded Generation Agreement”	the Bilateral Embedded Generation Agreement entered into between the parties on even date herewith.
“Capacity Reduction Charge”	Final Sums and as such subject to the provisions of Clauses [9.2 and 9.3 <i>-if user meets credit rating</i>] [9.6 and 9.7 <i>- if user does not meet credit rating</i>] of this Construction Agreement except that the Final Sums will be assessed by reference to those elements of the Construction Works no longer required as a result of a Notice of Reduction taking effect rather than on termination of this Construction Agreement .

"Charging Date"

the date upon which the **LCN Construction Works** are first **Commissioned** and available for use by the User 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 **LCN Transmission Reinforcement Works** are **Commissioned** and **LCN One Off Works** are completed as at that date. In the event that the **LCN Transmission Reinforcement Works** are not so **Commissioned** and/or the **LCN One Off 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** 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**.

"**LCN** Completion Date"

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

“Connected Planning Data”	data required pursuant to the Planning Code 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 Works :- (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 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, 2.13, 2.16 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 LCN Construction Works and the Wider Construction Works .
“LCN Construction Works”	the Transmission Connection Asset Works , LCN Transmission Reinforcement Works and LCN 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.

"Final Sums" the amount payable by the **User** on termination of this **Construction Agreement** being the aggregate from time to time and for the time being 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) 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

- (5) 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 **Final Sums** shall be referred to arbitration in accordance with the **Dispute Resolution Procedure**.

“Force Majeure”

shall have the meaning ascribed to it in the **CUSC** except that, for the avoidance of doubt, any delay (a) in the **User** obtaining its **Power Station Consents** and (b) in **The Company** obtaining any **Consents** for the **Wider Construction Works** shall not constitute an event of **Force Majeure**.

“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 One Off Works”	the works described in Appendix B1 Part 1 to this Construction Agreement .
“One Off Works”	the LCN One Off Works and Wider One Off Works .
“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 Transmission Entry Capacity .
“Power Station Consent”	means the consent for the User’s Power Station granted under Section 36 of the Electricity Act or planning permission granted under the Town and Country Planning Act 1990 in England and Wales or the Town and Country Planning (Scotland) Act 1997 in Scotland.
“Preliminary Request”	the request issued by The Company pursuant to Clause 7.4.1.
“Reduction Fee”	the fee payable by the User to The Company 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 Charging Statements as payable on a payment of actual costs basis in respect of a Modification Application .
“TEC Charging Date”	the day after the WCW Completion Date .

“Term”	the term of this Construction Agreement 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 The Company and the User to enable it to provide or as a consequence of the connection to and/or use of the GB Transmission System by the User as specified in Appendix N;
“Transmission Connection Assets”	the assets specified in Appendix A to the Bilateral Connection Agreement .
“Transmission Connection Asset Works”	the works necessary for construction and installation of the Transmission Connection Assets at the Connection Site specified in Appendix G to this Construction Agreement .
“LCN Transmission Reinforcement Works”	those works specified in Appendix H Part 1 to this Construction Agreement .
“User’s Works”	those works necessary for installation of the User’s Equipment which are specified in Appendix I to this Construction Agreement .

“WCW Completion Date”	means: (a) [] as such date may be amended pursuant to Clause [2.13, 2.16 and] 3.2 of this Construction Agreement ; or if earlier (b) the date upon which the WCW Construction Works are completed.
“Wider Construction Works” or “WCW”	the Wider Transmission Reinforcement Works and Wider 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 .
“Wider One Off Works”	the works described in Appendix B1 Part 2 to this Construction Agreement .
“Wider Transmission Reinforcement Works”	those works which in the reasonable opinion of The Company are necessary to extend or reinforce the GB Transmission System and which are specified in Appendix H Part 2.
“Works”	the Construction Works and the User’s Works .

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 **LCN Construction Works**:-

2.3.1 All dates specified in this **Construction Agreement** are subject to **The Company** obtaining **Consents** for the **LCN Construction Works** in a form acceptable to it within the time required to carry out the **LCN 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 **LCN Construction Works** to facilitate the granting of the **Consents**,

The Company shall be entitled to revise the **LCN Construction Works** (and as a consequence Appendix A 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**.

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 feuhold 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 Prior to the commencement of the **Transmission Connection Asset Works** the **User** shall have the right to terminate this **Construction Agreement** 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.

- 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 **LCN Construction Works** to such stage of completion as shall render them capable of being **Commissioned** in accordance with the **Construction Programme** and carrying out the **Wider Construction Works** so that they are completed 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 **Construction 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 **LCN Construction Works**, 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 **WCW 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 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 **Construction 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 **LCN 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 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** 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.

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 **LCN Completion Date** and/or **WCW 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 **LCN Completion Date** and/or **WCW 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.

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 **LCN Construction Works** are **Commissioned** is later than the **LCN Completion Date** **The Company** (if and to the extent that it is responsible for delayed completion beyond the **LCN 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 **LCN 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 **LCN 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 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 **LCN 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 **LCN Construction Works** and **User's 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 **LCN Construction Works** shall be **Commissioned** and (2) the **One Off Works** and **Third Party Works** shall

be completed **The Company** shall forthwith notify the **User** in writing that the **Connection Site** shall become **Operational**.

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 **LCN 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**. 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 Not Used

7.4 **Transmission Entry Capacity Reduction**

7.4.1 If, at any time prior to the **TEC Charging 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 **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 **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 **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 **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 **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 **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 **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 **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 **Capacity Reduction Charge** and **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**.

8. COMPLIANCE WITH SITE SPECIFIC TECHNICAL CONDITIONS

The **User** shall ensure that on the **LCN Completion Date** the **User's Equipment** complies with the site specific technical conditions set out in Appendices F1 to F5 to the **Bilateral Connection Agreement**.

9. CREDIT REQUIREMENTS

Alternate provisions apply depending whether or not the **User** does (9A) or does not (9B) meet **The Company's** required credit rating on signing the **Construction Agreement**. Details of the credit requirements are set out in the **CUSC**.

9A1 PROVISION OF SECURITY

9A.1.1 The **User** shall as soon as possible after execution of this **Construction Agreement** and in any event no later than one (1) month after the date of such execution confirm to **The Company** whether it meets **The Company Credit Rating**. Thereafter not less than 75 days before 1 April and 1 October in each year until (subject to Clause 9A.4) 28 days after the **TEC Charging Date** the **User** shall confirm it meets **The Company Credit Rating** to **The Company** (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 ceasing to meet **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.

9A.1.2 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 Clause 9A.1.1 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 Clause 9A.1.4 hereof.

9A.1.3 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 Clause 9A.1.2 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 meeting **The Company Credit Rating** for at least 6 months; or
- (vi) the **User** has not obtained from Standard and Poor's within 30 days of the written notification by **The Company** under Clause 9A.1.2(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 Clause 9A.1.4.

9A.1.4 The **User** shall within 21 days of the giving of a notice under Clause 9A.1.3 or within 30 days of the **User** confirming to **The Company** under Clause 9A.1.2(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 to **The Company** arising in the event of, or which have arisen prior to, termination of this **Construction Agreement**. The security to be provided 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 as appropriate. Such security shall be provided by way of:-

- (i) an irrevocable on demand standby **Letter of Credit** or guarantee; or
- (ii) cash held in escrow in a **Bank Account**; or
- (iii) any other form included in **The Company's** then current policy and procedure

such letter of credit or guarantee or security to be in a form agreed in writing by **The Company** and to be given by a **Qualifying Bank**, or **Qualifying Company**. Cash deposited in escrow shall be deposited with a **Qualifying Bank**. The choice of such security shall be at the discretion of the **User**.

9A.1.5 The **User** shall in addition to providing the requisite security enter into an agreement with **The Company**, which shall be supplemental to this **Construction Agreement** (the "Amending Agreement"). The **Amending Agreement** shall be in such form as **The Company** shall reasonably require and shall contain such provisions in relation to the **User's** obligations to provide and maintain security as shall be consequential upon the requirement for security having arisen, in line with **The Company's** then current provisions to the like effect in its agreements with other parties. The **Amending Agreement** shall relate to the procedures required in obtaining and maintaining the security and shall not alter or amend the amount of security required in terms of this **Construction Agreement**.

9A.1.6 In the event of **The Company's** credit requirements being reviewed at any time **The Company** shall advise the **User** in writing of the new credit requirements and the **User** shall within 30 days of such notification confirm in writing to **The Company** whether it wishes to enter into an **Amending Agreement** to reflect the new credit requirements. Thereafter if the **User** has confirmed it wishes to accept the new credit requirements **The Company** and the **User** shall within 30 days of such notification enter into an **Amending Agreement**.

9A.1.7 In the event that the facts or circumstances giving rise to the obligations of the **User** to provide the security have ceased, then **The Company** shall release the security and provisions to that effect shall be included in the **Amending Agreement**.

Final Sums

9A.2 Within 60 days of the date of termination of this **Construction Agreement** **The Company** shall:

- (a) furnish the **User** with a further 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.

9A.3.1 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.

9A.3.2 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.

9A.3.3As 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.

9A.4 The obligations to provide security under this Clause 9A shall continue until either all sums due under this **Construction Agreement** have been paid in full or security arrangements have been put in place by the **User** under the **Bilateral Connection Agreement** in accordance with Section 2 Part III of the **CUSC**. Until such time as the security arrangements are put in place in accordance with Section 2 Part III of the **CUSC** **The Company** shall be entitled to call upon the security put in place under the terms of this **Construction Agreement** for payment of **Termination Amounts** when due under the provisions of the **CUSC**.

Or

9B.1 Provision of Security

9B.1.1 The **User** hereby agrees that it shall forthwith upon the signing of this **Construction Agreement** provide to **The Company** or procure the provision to **The Company** of, and the **User** shall until (subject to Clause 9B.8) 28 days after the **TEC Charging Date** (unless and until this **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) 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 Appendix M hereto to provide security for the **User's** obligation to pay **The Company** any and all sums specified by **The Company** in accordance with Clause 9B.2 of this **Construction Agreement** as requiring to be secured in respect of:-

(a)

Final Sums.

9B.2 Provision of **Bi-annual Estimate** and **Secured Amount Statement**

9B.2.1 **The Company** shall provide to the **User** an estimate ("the **Bi-annual Estimate**") in substantially the form set out in Part 2 of Appendix M to this **Construction Agreement** and 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:-

- (a) forthwith on and with effect from the signing of this **Construction Agreement**, in respect of the period from and including the day of signing of this **Construction Agreement** until the next following 31st March or 30th September (whichever shall first occur); and
- (b) not less than 75 (seventy five) days (or if such day is not a Business Day the next following **Business Day**) prior to each 31st March and 30th September thereafter in respect of the period of six calendar months commencing on the immediately following 1st April or 1st October (as the case may be), until this **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.

9B.2.2 Such **Bi-annual Estimate** shall be accompanied by a statement (in the form of the **Secured Amount Statement** set out in Part 3 of Appendix M to this **Construction Agreement**) ("**Secured Amount Statement**") specifying the aggregate amount to be secured at the beginning of and throughout each such period.

9B.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 six calendar month 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 six calendar month period. Notwithstanding the foregoing, if **The Company** shall provide the **User** with any **Bi-annual Estimate** and **Secured Amount Statement** later than the date specified in Clause 9B.2.1 of this **Construction Agreement**, then the following shall apply. The **User** shall within 30 (thirty) days of receipt of the said **Secured Amount Statement** procure that to the extent that the amount in respect of which security has been or is to be provided pursuant to this Clause 9B.2.3 in respect of the relevant period ("**the Secured Amount**") falls short of the amount stated in the **Secured Amount Statement** ("**the Required Amount**") the **Secured Amount** shall be adjusted to the **Required Amount**.

9B.3 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 payment under any of the provisions of this **Construction Agreement**, **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**.

9B.4 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:-

9B.4.1 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

9B.4.2 the fairness and reasonableness of **The Company's** estimate; or

9B.4.3 whether there has been an **Event of Default** (under the **Construction Agreement** or the **CUSC**), or

9B.4.4 the lawfulness or otherwise of any termination or purported termination of this **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 Clause 9B.1 of and Appendix M to this **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.

9B.5 If there shall be any dispute as mentioned in Clause 9B.4 of this **Construction Agreement** the same shall, whether **The Company** shall have terminated this **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 Clauses 9B.4.1 and 9B.4.2 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 Clause 9B.5 shall survive termination) and, in the case of Clauses 9B.4.3 and 9B.4.4 be dealt with by referral to arbitration in accordance with the **Dispute Resolution Procedure**.

Final Sums

9B.6 Within 60 days of the date of termination of this **Construction Agreement** **The Company** shall:

- (a) furnish **the User** with a further 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.

9B.7.1 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.

9B.7.2 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.

9B.7.3 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.

9B.8 The obligations to provide security under this Clause 9 B shall continue until either all sums due under this **Construction Agreement** have been paid in full or security arrangements have been put in place by the **User** under the **Bilateral Connection Agreement** in accordance with Section 2 Part III of the **CUSC**. Until such time as the security arrangements are put in place in accordance with Section 2 Part III of the **CUSC** **The Company** shall be entitled to call upon the security put in place under the terms of this **Construction Agreement** for payment of **Termination Amounts** where due under the provisions of the **CUSC**.

10. EVENT OF DEFAULT

As before 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**,

or to enter into the **Amending Agreement** pursuant to Clauses 9A.1 or 10A.3 of this **Construction Agreement**.

10A.2 If having entered into the **Amending Agreement** and having provided security satisfactory to **The Company** pursuant to Clauses 9A.1 and 10A.3 of this **Construction Agreement**.

- (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 this **Construction Agreement** as varied by the **Amending Agreement** 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 this **Construction Agreement** as varied by the **Amending Agreement**;
- (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** as varied by the **Amending 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;
- (c) Any party who may at any time be providing security to **The Company** pursuant to the provisions of this **Construction Agreement** as varied by the **Amending Agreement** 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 its then current policy and procedures and in such amount as **The Company** shall specify to the **User** in the aforesaid notice. The **User** shall if required by **The Company**, in addition to providing the requisite security, within a period of 30 days following the date on which **The Company** gives the **User** such notice enter into an **Amending Agreement**. Such **Amending Agreement** shall contain such provisions in relation to the **User's** obligations to provide and maintain security as shall be consequential upon the requirement for security having arisen and shall be in such form as **The Company** shall reasonably require in line with **The Company's** then current provisions to the like effect in its connection agreements with other parties.

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 Any of the **Events of Default** in Paragraph 5.3.1 of the **CUSC** have occurred and are occurring.

Or

10B Event of Default

Any of the following events shall constitute an **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** (as defined in Appendix M) in favour of **The Company** and **Valid** (as defined in Appendix M) 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 Clauses 9B.1 or 10B.1 of and Appendix M to this **Construction Agreement** 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 Appendix M to this **Construction Agreement**.

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** pursuant to Clauses 9B.1 or 10B.1 of and Appendix M to this

Construction Agreement fails to pay **The Company** any sum demanded in any Notice of Drawing (as defined in Appendix M) pursuant thereto.

10B.5 Any of the **Events of Default** in Paragraph 5.3.1 of the **CUSC** have occurred and are occurring.

10A.4/

10B.6 Once an **Event of Default** has occurred and is continuing **The Company** may give notice of termination to the **User** whereupon this **Construction Agreement** shall forthwith terminate and **The Company** shall disconnect all the **User's Equipment** at the **Connection Site** and the provisions of Clause 11 shall apply:

11. TERMINATION

11.1 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**.

11.2 If this **Construction Agreement** terminates prior to the **TEC Charging Date** the **User** shall be liable to pay **The Company Final Sums** and shall forthwith on the date this **Construction Agreement** so terminates to pay to **The Company**

(a) a sum equal to **The Company's** fair and reasonable estimate of **Final Sums**,

such payment to be made within 14 days of the date of **The Company's** invoice(s) in respect thereof and subject to adjustment accordance with Clause 9A.3.3. or 9B.7.3.

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 **TEC Charging Date** the provisions of Clause 11 shall apply.
- 12.3 The associated **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.

CUSC v1.5

15.3 **The Company** has the right to vary Appendices in accordance with Clauses 2.3, 2.11, 2.16, 3 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 WIDER TRANSMISSION REINFORCEMENT WORKS

APPENDIX [L]

INDEPENDENT ENGINEER

Company:

Connection site:

Type:

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

PART 2

LCN ONE OFF WORKS

PART 2

WIDER ONE OFF WORKS

APPENDIX [M]

PART 1

SECURITY ARRANGEMENT

1. **DEFINITIONS**

In this Appendix M, the following terms have the meanings set out next to them:-

“Bi-annual Estimate” means an estimate pursuant to Clause [9B.2.1] of this Construction Agreement of all payments to be made or which may be required to be made by the User in any relevant period, such estimate to be substantially in the form set out in Part 2 of this Appendix M;

“Bank Account” means a separately designated bank account in the name of The Company at such branch of Barclays Bank PLC, or such branch of any other bank, in the City of London as is notified by The Company to the User, bearing interest from (and including) the date of deposit of principal sums to (but excluding) the date of withdrawal of principal sums from such account, mandated for withdrawal of principal solely by The Company against delivery of a Notice of Drawing for the amount demanded therein and mandated for the transfer of any interest accrued to the Bank Account to such bank account as the User may specify;

- “Letter of Credit” means an irrevocable standby letter of credit in a form reasonably satisfactory to The Company but in any case expressed to be governed by the Uniform Customs and Practice for Documentary Credits 1993 Revision ICC Publication No. 500 or such other form as may be reasonably satisfactory to The Company and allowing for partial drawings and providing for the payment to The Company on demand forthwith on and against The Company’s delivery to the issuer thereof of a Notice of Drawing of the amount demanded therein;
- “Notice of Drawing” means a notice of drawing signed by or on behalf of The Company substantially in the form set out in Part 4 of this Appendix M;
- “Performance Bond” means an on first demand without proof or conditions irrevocable performance bond or performance guarantee executed as a deed in a form reasonably satisfactory to The Company but in any case allowing for partial drawings and providing for the payment to The Company on demand forthwith on and against The Company’s delivery to the issuer thereof of a Notice of Drawing of the amount demanded therein;
- “Qualified Bank” means a City of London branch of a bank, its successors and assigns, which has throughout the validity period of the Performance Bond or Letter of

Credit it issues in favour of The Company, a rating of at least A- in Standard and Poor's long term debt rating or A3 in Moody's long term debt rating provided that such bank is not during such validity period put on any credit watch or any similar credit surveillance which gives The Company reasonable cause to doubt that such bank may not be able to maintain the aforesaid rating throughout the validity period and no other event has occurred which gives The Company reasonable cause to have such doubt;

"Qualified Company"

a company which is a public company or a private company within the meaning of section 1(3) of the Companies Act 1985 and which is either :

- (a) a shareholder of the **User** or any holding company of such shareholder-or
- (b) any subsidiary of any such holding company, but only where the subsidiary
 - (i) demonstrates to **The Company's** satisfaction that it has power under its constitution to give a **Performance Bond** other than in respect of its subsidiary;
 - (ii) provides an extract of the minutes of a meeting of its directors recording that the directors have duly concluded that the giving of the **Performance Bond** is likely to promote the success of that subsidiary for the benefit of its members;
 - (iii) provides certified copies of the authorisation by every holding company of the subsidiary up to and including the holding company of the **User**, of the giving of the **Performance Bond**,

(the expressions “holding company” and “subsidiary” having the respective meanings assigned thereto by section 736, Companies Act 1985 as supplemented by section 144(3), Companies Act 1989) and which has throughout the validity period of the **Performance Bond** it gives in favour of **The Company**, a rating of at least A- in Standard and Poor’s long term debt rating or A3 in Moody’s long term debt rating or such lesser rating which **The Company** may in its absolute discretion allow by prior written notice given pursuant to a resolution of its board of directors for such period and on such terms as such resolution may specify provided that such company is not during such validity period put on any credit watch or any similar credit surveillance procedure which gives **The Company** reasonable cause to doubt that such company may not be able to maintain the aforesaid rating throughout the validity period of the **Performance Bond** and no other event has occurred which gives **The Company** reasonable cause to have such doubt;

“Secured Amount Statement”

means a statement accompanying the Bi-annual Estimate setting out the amount of the User’s Obligation based on figures contained in the Bi-annual Estimate being the amount for which security shall be provided to The Company pursuant to Clause 9B of this Construction Agreement;

“User’s Obligation” means the User’s obligation to pay under this Construction Agreement:-

(i) Final Sums

“Valid” means valid for payment to be made thereunder against delivery of a Notice of Drawing given within the period stated therein.

2. **SECURITY REQUIREMENT**

The User’s Obligation shall be secured by any one of the following:-

- 2.1 A Performance Bond or Letter of Credit from a Qualified Bank for the amount stated in the Secured Amount Statement as the estimated amount of the User’s Obligation to be secured, such Performance Bond or Letter of Credit to be Valid for at least the period stated in such Secured Amount Statement and to be renewed periodically where applicable in the manner stated in paragraph 3.3 of this Appendix M; or
- 2.2 A cash deposit in a Bank Account at least for the amount stated in the Secured Amount Statement as the estimated amount of the User’s Obligation to be secured, such cash deposit to be increased or reduced periodically where applicable in the manner stated in paragraph 3.4 of this Appendix M; or
- 2.3 A Performance Bond from a Qualified Company for the amount stated in the Secured Amount Statement as the estimated amount of the User’s Obligation to be secured, such Performance Bond to be Valid for at least the period stated in such Secured Amount Statement and to

be renewed periodically where applicable in the manner stated in paragraph 3.3 of this Appendix M.

3. **GENERAL PROVISIONS**

- 3.1 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.
- 3.2 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.

3.3 The following provisions shall govern the issuance, renewal and release of the Performance Bond or Letter of Credit:-

3.3.1 The Performance Bond or Letter of Credit shall be Valid initially from the signing of this Construction Agreement at least to and including the following 31st March or 30th September whichever is the earlier date. Such Performance Bond or Letter of Credit shall be for an amount not less than that stated in the Secured Amount Statement as the amount of the User's Obligation to be secured during the period specified in the Secured Amount Statement.

3.3.2 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 next following 31st March or 30th September whichever is the earlier date such Performance Bond or Letter of Credit shall be renewed so as to be Valid for not less than 6 months commencing from the immediately following 1st April or 1st October (as the case may be). Such renewed Performance Bond or Letter of Credit shall be for an amount not less than the amount of the User's Obligation stated in the Secured Amount Statement as the amount to be secured during the period that such renewed Performance Bond or Letter of Credit shall be Valid.

3.3.3 Thereafter, the renewed Performance Bond or Letter of Credit shall be further renewed in like manner every 6 months.

3.4 The following provisions shall govern the maintenance of cash deposits in the Bank Account:-

- 3.4.1 The amount of the cash deposit to be maintained in the Bank Account shall be maintained from the date of this Construction Agreement at least to and including the following 31st March or 30th September, whichever is the earlier date. Such cash deposit shall be in an amount as stated in the Secured Amount Statement as the amount of the User's Obligation to be secured during the period stated in the Secured Amount Statement.
- 3.4.2 If the amount stated in the Secured Amount Statement as the amount of the User's Obligation to be secured from the following 1st April to 30th September or from the following 1st October to 31st March (as the case may be) is an amount greater than the amount then secured, the cash deposit in the Bank Account shall be increased to such greater amount on a date which is 45 days before the following 31st March or 30th September (as the case may be) which immediately precedes the commencement of the relevant above mentioned period.
- 3.4.3 If such amount stated in the Secured Amount Statement 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 next following 31st March or 30th September (as the case may be) ("the Release Date").
- 3.4.4 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.
- 3.4.5 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.

3.5 Notwithstanding any provision aforesaid:-

3.5.1 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 aggregate amount required to be secured pursuant to the Secured Amount Statement for any period specified therein.

3.5.2 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 1st April or 1st October (as the case may be) and committed at least 45 days before the immediately preceding 31st March or 30th September (as the case may be) 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 such immediately preceding 31st March or 30th September (as the case may be).

(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 such immediately preceding 31st March or 30th September (as the case may be).

3.5.3 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 following 1st April or 1st October (as the case may be). However, where the amount required by the Secured Amount Statement to be secured for any period is less than the amount required to be secured in the preceding period, the substituted security shall not be released until 7 days after the then following 31st March or 30th September (as the case may be).

PART 2

BI-ANNUAL ESTIMATE FOR CONSTRUCTION AGREEMENT
DATED []

Amount due and amount which will
or might fall due for the period
commencing on and including
[] and ending on and
including [] in
respect of which security is
required

1. The Company Engineering Charges & expenses
for obtaining Consents pursuant to
to Clause 2.4
2. Final Sums
- [3. One Off Charge]

PART 3

SECURED AMOUNT STATEMENT

CONSTRUCTION AGREEMENT DATED []

Amount in which security is
required for the period
commencing on and including
[] and ending on and
including []

User's Obligation

We hereby certify that the amount to be secured in respect of the User's Obligation is as stated above in respect of the named period.

for and on behalf of
NATIONAL GRID ELECTRICITY TRANSMISSION PLC

Duly authorised officer

PART 4

NOTICE OF DRAWING

To [] Bank/Public Limited Company/Limited

copy to:

[date]

Dear Sirs,

RE: **CONSTRUCTION AGREEMENT DATED []**
PERFORMANCE BOND NO./DATED []/LETTER OF CREDIT NO.
[]/BANK ACCOUNT NO. [] (“THE SECURITY”)

We refer to the above Security in our favour. We hereby demand immediate payment thereunder in the amount of £[].

We require payment to be made by telegraphic transfer to:-

Bank plc

Address:

Sort Code:

Account Name: National Grid Electricity Transmission plc

Account No:

Yours faithfully,

for and on behalf of
NATIONAL GRID ELECTRICITY TRANSMISSION PLC

Duly authorised officer

CUSC v1.5

CUSC v1.5

APPENDIX [N]
THIRD PARTY WORKS

CUSC v1.5

END OF SCHEDULE 2 EXHIBIT 3

CAP 164 WGAA v2 2 30 11 08

CUSC - EXHIBIT B

THE CONNECTION AND USE OF SYSTEM CODE CONNECTION APPLICATION

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

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

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

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**~~ **The Company shall notify the Applicant of such date. In the case of an application on the basis of the Interim TEC Arrangements the effective date referred to above will determine the ITEC Application Period that the application falls within and such application shall not be effective for the purposes of Paragraphs 6 and 7 below until the last day of the ITEC Application Period in which such effective date occurs. The Company** shall notify the **Applicant** of such date.

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

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**. Please note that where the offer is on the basis of the Interim TEC Arrangements, such offer will not be made until after the closure of the relevant ITEC Application Period. The Company is required to make the Offer within 3 months of the closure of the relevant ITEC Application Period.
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**² and the **Applicant** is advised to study them carefully. **Data** submitted pursuant to this application shall be deemed submitted pursuant to the **Grid Code**.
11. **The Company's Offer** will be based upon its standard form terms of **Connection Offer** and the **Charging Statements** issued by **The Company** under Standard Conditions C4 and C6 of the

² www.nationalgrid.com/uk/electricity

Transmission Licence. The **Applicant** should bear in mind **The Company's** standard form terms of **Offer** when making this application.

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**³ for further details.
13. **Applicants** of a type set out in **Grid Code** CC 8.1, Generators and DC Converter Station Owners, should appreciate that they will be required to perform **Mandatory Ancillary Services** to ensure that System Operational Standards can be achieved. This requirement may have implications towards **Plant** specification. You should be satisfied that before an application is made that your intended **Plant** design can meet the requirements.
14. Under Special Condition M of the Transmission Licence **The Company** has additional requirements in respect of information on **Offers** where an **Applicant** has applied for connections in Scotland as well as in England and Wales and the **Applicant** doesn't intend to connect at all locations, but intends to choose which location or locations to connect at on the basis of the offers it receives. Question 5 in Section A is intended to assist **The Company** in early identification of this situation arising. **The Company's Website**⁴ contains a statement that describes the means by which **The Company** shall ensure compliance with Special Condition M of its **Transmission Licence**.
15. **Applicants** have the option to request a **Connection Offer** on the basis of a **Design Variation**. In requesting such an **Offer**, the **Applicant** acknowledges that the connection design (which provides for connection to the **GB Transmission System**) will fail to satisfy the deterministic criteria detailed in paragraphs 2.5 to 2.13 of the **GB SQSS**. In making such an **Offer**, in accordance with its obligations under Paragraphs 2.13.2 and 2.13.7 of **CUSC**, **The Company** may include **Restrictions on Availability**. If **Applicants** require further assistance on this option they are recommended to contact **The Company** before completing this application form.
16. The **Applicant** has the ability to pay a fixed price application fee in respect of their application or pay the actual costs incurred (variable price application fee). The fixed price application fee is derived from analysis of historical costs of similar applications. The variable price application fee is based on an advance of the Transmission Licensee's Engineering and out of pocket expenses and will vary according to the size of the scheme and the amount of work involved. The **Applicant** is requested to indicate their preferred basis of application fee in Section A question 4. The **Applicant** is advised that further information can be obtained from the **Charging Statements** which can be found on **The Company's Website**⁵.

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

⁴ www.nationalgrid.com/uk/electricity

⁵ www.nationalgrid.com/uk/electricity

17. **The Company** will provide an **Offer** 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.

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**⁵.

19. Please complete this application form in black print and return it together with the appropriate application fee to the Customer Services Manager, National Grid Electricity Transmission plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA (Telephone No. 01926 654634). In addition to returning the application form to the Customer Services Manager an electronic copy of the application form may be e-mailed to **The Company** at camdata@uk.ngrid.com

20. For the most up to date contact details applicants are advised to visit **The Company's Website**⁵.

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 Website⁵ provides more information on the terms it offers for such technical capability.

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

Connection Site []

Generating Unit(s) (if 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 **Transmission Entry Capacity**.....MW

APPLICATION FOR A NEW CONNECTION

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

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

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

Yes []

No []

APPLICATION FOR A NEW CONNECTION

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

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 []

11. Please confirm if you would like an offer on the basis of the Interim TEC Arrangements

YES/NO

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

.....

.....

.....

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 D. PROGRAMME

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

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

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

Notes

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

CONNECTION APPLICATION

1. We hereby apply to connect our **Plant** and **Apparatus** to the **GB Transmission System** 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. ~~6.~~ 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**.

8. ~~7.~~ 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**.

9. ~~8.~~ 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**.

10. ~~9.~~ All communications in relation to this **Offer** must, in the first instance, be directed to [description].

Yours faithfully

.....
for and on behalf of
The National Grid Company plc

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

END OF EXHIBIT C

CUSC - EXHIBIT D

**THE CONNECTION AND USE OF SYSTEM CODE
USE OF SYSTEM APPLICATION**

**EMBEDDED GENERATOR
DISTRIBUTION INTERCONNECTOR OWNER
SMALL POWER STATION TRADING PARTY**

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

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

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

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

not be effective for the purposes of Paragraphs 6 and 7 below until the last day of the ITEC Application Period in which such effective date occurs. 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 **Transmission Licence**. Please note that, where the offer is on the basis of the Interim TEC Arrangements, such offer will not be made until after the closure of the relevant ITEC Application Period and that in accordance with Paragraph 2.12.2 of the CUSC, The Company must make such an offer within 3 months after the closure of the ITEC Application Period.
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**² and the **Applicant** is advised to study them carefully. **Data** submitted pursuant to this application shall be deemed submitted pursuant to the **Grid Code**.
11. **The Company's Offer** will be based to the extent appropriate upon its standard form terms for **Use of System Offer** and the **Charging Statements** issued by **The Company** under Standard Conditions C4 and C6. The **Applicant** should bear in mind **The Company's** standard form terms of **Offer** when making this application.
12. In particular please note that **The Company** may require as a condition of the **Offer**, that the **Applicant's Plant** or **Apparatus** should meet or provide some or all of the technical requirements set out in the Appendices of the draft **Bilateral Embedded Generation Agreement** attached to **The Company's** standard form terms of **Offer** and may propose that the **Applicant's Plant** or **Apparatus** should have the capability to provide **Mandatory Ancillary Services**.
13. As provided for in **Grid Code** CC8.1 Generators and DC Converter station owner should appreciate that they will be required to perform **Mandatory Ancillary Services** to ensure that System Operational Standards can be achieved. This requirement may have implications towards plant specification. You should be satisfied before an application is made that your intended plant design can meet the requirements.
14. **The Applicant** has the ability to pay a fixed price application fee in respect of their application or pay the actual costs incurred (variable price application fee). The fixed price application fee is derived from analysis of historical costs of similar applications. The variable price application fee is based on an advance of the Transmission Licensee's Engineering and out of pocket expenses and will vary according to the size of the scheme and the amount of work involved. The **Applicant** is requested to indicate their preferred basis of application fee in Section A question 4. The **Applicant** is advised that further information can be obtained from the **Charging Statements** which can be found on **The Company's Website**³.
15. **Applicants** have the option to request a **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

² www.nationalgrid.com/uk/electricity

³ www.nationalgrid.com/uk/electricity

under Paragraphs ~~2.13.2 and 2.13.7~~[3.7.7](#) 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. 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
17. For the most up to date contact details applicants are advised to contact **The Company Website**³.

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 Website⁴ provides more information on the terms it offers for such technical capability.

5. Please state the required **Transmission Entry Capacity**.....MW

5. Please confirm if:

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

and/or

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

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

.....

.....

.....

If yes, please confirm if you require information from The Company in relation to the probability of Notification of Restrictions on Availability being issued YES/NO

⁴ <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

7. Please confirm if you would like an offer on the basis of the Interim TEC Arrangements

YES/NO

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

.....

.....

.....

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 :

Embedded Generator	[]
Distribution Interconnector Owner	[]
Small Power Station Trading Party	[]

[Please tick correct option].

SIGNED BY:

.....
For and on behalf of the **Applicant**

Date:.....

END OF EXHIBIT D

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 This [Offer is made pursuant to the Interim TEC Arrangements.](#)

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

ANNEX 2 – WORKING GROUP TERMS OF REFERENCE AND MEMBERSHIP

Working Group Terms of Reference and Membership

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

RESPONSIBILITIES

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

SCOPE OF WORK

4. The Working Group must consider the issues raised by the Amendment Proposals and consider if each of the proposals identified better facilitates achievement of the Applicable CUSC Objectives.
5. In addition to the overriding requirement of paragraph 4, the Working Group shall consider and report on the following specific issues:
 - Impact on bilateral agreements (BCA, BEGAs, CONSAG, Offers etc.)
 - Impact on core industry documents and other documents (incl. Transmission License)
 - Impact on computing systems, central and individual CUSC party
 - Application process and impact on bilateral agreements for short-term access
 - Implementation and transition requirements, including timescales
 - The impact on System Operator costs, internal and external
 - A cost benefit analysis, including market impacts and the cost of carbon⁸

⁸ Taken account of Ofgem guidance with respect to:
<http://www.ofgem.gov.uk/Licensing/IndCodes/Governance/Documents1/Code%20objectives%20letter%20-%20final%20for%20external%20publication.pdf> (note link to CUSC WG established on carbon analysis)

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

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

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

MEMBERSHIP

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

Chair	Hêdd Roberts (National Grid)
National Grid	Patrick Hynes (Proposer)
Industry Representatives	James Anderson
	Bob Brown
	Graeme Cooper
	Tony Dicicco
	Richard Ford
	Garth Graham
	Paul Jones
	Simon Lord
	Paul Mott
	Rekha Patel
	Rob Rome
	Tim Russell
	Helen Snodin
Merel van der Neut Kolfshoten	
Barbara Vest	
Authority Representative	David Hunt
Technical Secretary	Kathryn Sorrell
	Jeremy Caplin (Technical Advisor)
	STC (Technical Advisor)

NB: Working Group must comprise at least 5 Members (who may be Panel Members)

14. The Chair of the Working Group and the Chair of the CUSC Panel must agree a number that will be quorum for each Working Group meeting. The agreed figure for CAP161, 162, 163 and 164 is that at least 5 Working Group members must participate in a meeting for quorum to be met.
15. A vote is to take place by all eligible Working Group members (for the avoidance of doubt, that is (i) the Proposer (National Grid) and (ii) the Industry representatives listed above) on the proposal and each Working Group Alternative, as appropriate, as to whether it better facilitates the CUSC Applicable Objectives and indicate which option is considered the BEST with regard to the CUSC Applicable Objectives. Working Group Members will be given not less than five business days notice of the meeting at which the vote will take place. The results from the vote shall be recorded in the Working Group Report.
16. Working Group Members or their appointed alternate is required to attend a minimum of 50% of the Working Group Meetings to be eligible to participate in the Working Group vote.
17. The Technical Secretary to keep an Attendance Record, for the Working Group meetings and to circulate the Attendance Record with the Action Notes after each meeting. This will be attached to the Final Working Report.

18. The membership can be amended from time to time by the CUSC Amendments Panel.
19. If any Working Group Member wishes to nominate an Alternate (to act on their behalf in their absence from meetings) then this should be sent to the Working Group Chair once the Working Group is under way who will confirm (to the Working Group Member) that the Alternate is duly designated. For the avoidance of doubt if the Working Group Chair believes the suggested Alternate does not have sufficient expertise in the issues being considered by the Working Group they will ask the Working Group Member to suggest a more suitable Alternate.
20. Observers may be permitted by the Chair to attend any meeting. It should be noted that the observer (i) will not have a vote and (ii) cannot speak unless asked to do so by the Chair. Any CUSC Party wishing to be an observer should agree with the Working Group Chair advance .The Chair may invite - +additional industry experts to any meeting as required to ensure efficient and comprehensive coverage of the agenda.

RELATIONSHIP WITH AMENDMENTS PANEL

21. The Working Group shall seek the views of the Amendments Panel before taking on any significant amount of work. In this event the Working Group Chair should contact the CUSC Panel Secretary.
22. The Working Group shall seek the Amendments Panel advice if a significant issue is raised during the Consultation process which would require a second period of Consultation in accordance with 8.17.17.
23. Where the Working Group requires instruction, clarification or guidance from the Amendments Panel, particularly in relation to their Scope of Work, the Working Group Chair should contact the CUSC Panel Secretary.
24. The working group shall maintain a register of assumptions and issues, which shall be published and reported to the Amendments Panel and other Transmission Access working groups on a regular basis.

MEETINGS

25. The Working Group shall, unless determined otherwise by the Amendments Panel, develop and adopt its own internal working procedures and provide a copy to the Panel Secretary for each of its Amendment Proposals.
26. To ensure an efficient process (and mindful of room logistics) only the Working Group Member **or** their appointed Alternate can attend a meeting. If an alternate wishes to attend the same meeting as their associated member this will be as an observer (under item 18. above) unless they have previously agreed with the Working Group Chair.

REPORTING

27. The Working Group Chair shall prepare final reports to the **25th July** Amendments Panel responding to the matter set out in the Terms of Reference.

28. A draft Working Group report will be produced individually for each of CAP161, 162, 163 and 164. Each draft working group report will include the relevant information from Access Working Group 3.
29. A draft Working Group Report must be circulated to Working Group members with not less than five business days given for comments.
30. Any unresolved comments within the Working Group must be reflected in the final Working Group Report.
31. The Working Group Chair (or another Working Group member nominated by him) will present the Working Group report to the Amendments Panel as required.

ANNEX 3 – WORKING GROUP ATTENDANCE REGISTER

Working Group 1 attendance (the numbers relate to the associated alternative)

Working Group 1 members	13	28	10	23	8	18	6	20	3	10	19	23	5	12	18
	May		Jun		Jul		Aug		Sep		Oct		Nov		
James Anderson	✓	✓	✓	✓	6		✓	✓	✓	✓	✓	✓	✓	✓	✓
Bob Brown	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓
Graeme Cooper		✓		✓	✓	✓					✓		✓	✓	✓
Tony Diccico	✓	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Richard Ford	✓	✓	✓	✓	✓		✓		✓	✓			✓		✓
Garth Graham	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Paul Jones	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓
Simon Lord	✓	2	✓	✓	✓	✓	✓	2	2	2	✓		2	✓	✓
Paul Mott	✓		✓	✓	✓	✓	✓	8	✓	8	✓		✓	✓	
Rekha Patel	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rob Rome	✓	✓	✓	✓	✓	✓	✓	✓		✓	9		9	✓	✓
Tim Russell	✓	✓	✓	✓	7	✓		✓	✓	✓	✓	✓	✓	✓	✓
Helen Snodin	✓	3	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Merel van der Neut Kolschoten	✓	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Barbara Vest	✓	✓	5	✓	✓	✓		✓	✓	✓	5	✓			
Patrick Hynes	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Hêdd Roberts (Chair)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kathryn Sorrell (Tec Sec)	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Alternates and observers	13	28	10	23	8	18	6	20	3	10	19	23	5	12	18
	May		Jun		Jul		Aug		Sep		Oct		Nov		
Jeremy Caplin (NG)	✓	✓	✓	✓			✓	✓	✓	✓	✓				
David Hunt (Ofgem)		✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓
Deborah MacPherson (STC)	✓	✓		✓	✓			✓	✓		✓	✓	✓	✓	
Min Zhu (Ofgem)	✓								✓	✓					
Brian Taylor (NG)	✓														
Andy Rimmer		2						2	2	2			2		
Fiona Navesey		4													
Dennis Timmins		1													
Nigel Scott		3													
Ian Moss			5	✓	✓	✓	✓		✓		5				
Emma Luckhurst								8		8					
Stuart Cook (Ofgem)					✓										
Gerry Hoggan					6										
Paul Hurlock (National Grid)					✓	✓									
Gaynor Hartnell					7										
Ian Lomas (BERR)							✓								
Kevin Dibble								2							
Louise Schmitz											9		9		

On teleconference is considered as attending

ANNEX 4 – AMENDMENT PROPOSAL FORM

CUSC Amendment Proposal Form	CAP: 164
Title of Amendment Proposal:	
Transmission Access – Connect and Manage	
Description of the Proposed Amendment <i>(mandatory by proposer):</i>	
<p>It is proposed that Generators who wish to connect to the system should have a fixed date for receiving TEC. This date, the 'TEC effective date', will be the later of the completion of "local" transmission works or an agreed fixed lead time. The fixed lead time will be discussed and agreed in the amendment assessment stage and codified in the CUSC. Initial options are 3 years (aligns with planning restrictions in Scotland); or 4 years (more consistent with historic performance of providing reinforcements).</p> <p>The TEC effective date will be subject to 'force majeure' provisions as currently defined in the CUSC.</p> <p>Following the initial offer, the TEC effective date can only be changed through a modification application; and if both the Generator and the Company agree, and other CUSC parties are not unduly affected.</p> <p>The request for a TEC effective date is optional, and is made at the time of application. All types of generation seeking TEC can request a TEC effective date.</p> <p>The definition of 'local' works will be established through the assessment of this proposal i.e. how 'deep' and what the consequences of such a definition would be.</p> <p>Although not part of the CUSC, it is proposed that TEC granted with a TEC effective date be charged on the same principle as existing TEC, which is long-term incremental investment based (including any changes to local charging arrangements consistent with the changing principles).</p> <p>There is a symmetrical obligation associated with the guarantee of a TEC date. This requires the generator to pay TNUoS charges for a minimum period irrespective of readiness of the generator to physically connect, subject to force majeure. The minimum period, will be agreed in the assessment of the proposal, to ensure equitable risk between other users and the connectee. This is intended to encourage the generator to apply only when consents have been granted i.e. for the purposes of this, force majeure excludes planning.</p> <p>The transition arrangements for existing contracts will be agreed in the amendment assessment stage.</p>	
Description of Issue or Defect that Proposed Amendment seeks to Address <i>(mandatory by proposer):</i>	
<p>The current process for connection in the CUSC may not allow generators to connect in timescales for building a power station, thus restricts their timely connection to the transmission system and participation in the energy market.</p>	
Impact on the CUSC <i>(this should be given where possible):</i>	
<p>This amendment will require changes to sections 2, 3, 6 & 11. There may be a number of minor changes to other sections of the CUSC. It is also envisaged there will be a number of changes to the exhibits and schedules to the CUSC, including those relating to connection applications and offers and construction agreements.</p>	
Impact on Core Industry Documentation <i>(this should be given where possible):</i>	
<p>To be identified during assessment.</p> <p>The connection process between National Grid and the Transmission Owners contained in the STC and STCPs should be reviewed. In the short term, transition arrangements may be required to facilitate significant changes to the connection plan.</p>	

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

None identified.

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

Depending on the volume of constraints that are created through take up of early connection, a new constraint management processes may need to be developed. These may have a further impact on computing systems.

It is envisaged that transmission licensees may need to seek derogations for early connection from the Authority, further to this they would be required to review of the Security and Quality Supply Standard.

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

The proposed amendment would better facilitate the achievement of Applicable CUSC Objectives (a) and (b), the efficient discharge by the licensee of the obligations imposed upon it under the Acts and by the licence, and facilitating effective competition in generation and, by:

- Promoting the more efficient use of the transmission system through facilitating connection in advance of wider transmission works.
- Improving the signals for design of the transmission system by ensuring that only projects that are likely to connect within a defined timescales actually apply for connection.

Details of Proposer: Organisation's Name:	National Grid
Capacity in which the Amendment is being proposed: (i.e. CUSC Party, BSC Party or "energywatch")	CUSC Party
Details of Proposer's Representative: Name: Organisation: Telephone Number: Email Address:	Patrick Hynes National Grid 01926656319 Patrick.hynes@uk.ngrid.com
Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address:	Duncan Burt National Grid 01926656703 duncan.burt@uk.ngrid.com
Attachments (Yes/No): No If Yes, Title and No. of pages of each Attachment:	

Notes:

1. Those wishing to propose an Amendment to the CUSC should do so by filling in this "Amendment Proposal Form" that is based on the provisions contained in Section 8.15 of the CUSC. The form seeks to ascertain details about the Amendment Proposal so that the Amendments Panel can determine more clearly whether the proposal should be considered by a Working Group or go straight to wider National Grid Consultation.

2. The Panel Secretary will check that the form has been completed, in accordance with the requirements of the CUSC, prior to submitting it to the Panel. If the Panel Secretary accepts the Amendment Proposal form as complete, then he will write back to the Proposer informing him of the reference number for the Amendment Proposal and the date on which the Proposal will be considered by the Panel. If, in the opinion of the Panel Secretary, the form fails to provide the information required in the CUSC, then he may reject the Proposal. The Panel Secretary will inform the Proposer of the rejection and report the matter to the Panel at their next meeting. The Panel can reverse the Panel Secretary's decision and if this happens the Panel Secretary will inform the Proposer.

The completed form should be returned to:

Beverley Viney
Panel Secretary
Commercial Frameworks
National Grid
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Or via e-mail to: Beverley.Viney@uk.ngrid.com

(Participants submitting this form by email will need to send a statement to the effect that the proposer acknowledges that on acceptance of the proposal for consideration by the Amendments Panel, a proposer which is not a CUSC Party shall grant a licence in accordance with Paragraph 8.15.7 of the CUSC. A Proposer that is a CUSC Party shall be deemed to have granted this Licence).

3. Applicable CUSC Objectives** - These are defined within the National Grid Electricity Transmission plc Licence under Section C7F, paragraph 15. Reference should be made to this section when considering a proposed amendment.

ANNEX 5 – ASSUMPTIONS FOR COSTING ANALYSIS

Carbon costing update - Methodology / Assumptions for Creating Background Generation

- SYS data taken from the TEC Register between 2007/08 to 2021/22
- Consideration of LCPD plants factored in by removing from the background generation at 2015. No consideration taken into the capacity of LCPD affected plants between 2008/09 and 2015 (i.e. assume none reach their 20,000 hour max.)
- Assume all Nuclear AGR Stations are granted 5 year life extensions.
- Assume all Nuclear Plant removed from background generation at end of their lifetime (after including additional 5 years for AGR stations).
- As a result of LCPD plant closure, assume associated GT's also close (Tilbury, Kingsnorth, Didcot A).
- Assume Oil behaves the same as LCPD Plant; dropping out at end of 2015.
- Data split into SYS study zones and then split into constraints model study zones (MZ1 – MZ7)
- Data in each constraints model study zone categorised by generation type
- Generation merit order established by ranking fuel type according to generation fuel, using the merit order published in the GBSQSS Consultation Document (Review for Onshore Intermittent Generation).
- Additional assumptions on the merit order;
 - CHP, Biomass & Thermal categorised with base gas
 - CCGT plant split between base gas and marginal gas based on the year of plant commission (i.e. any plant commissioned after mid-1997 assumed to be base gas)
 - Coal split between base and marginal based on age, all opt out is marginal.
- All other generation types assumed to maintain the same capacity between 2014/15 and 2020.
- Propose to implement multiple drop out rates per zone to “new” plant (i.e. plant not existing in 2007/08 year). This allows us to avoid publishing specific drop out assumptions on individual projects. The initial drop out rate will be for wind is 20%. For non wind the drop out rate is 70%. The drop out rate means that contracted project do not come to fruition.
- The model includes a closure rate for conventional; this is set at 0. Need to be careful does not double count with the specific closures above.
- The drop out and closure assumptions maintain a plant level of slightly less than 25% in 2020, assuming a 30% load factor of renewable.
- Generator pricing will stay at current levels.
- Generator volumes are established using probabilistic analysis techniques as described in the SQSS consultation⁹.
- Analysis is on six boundaries B2, B6, B8, B9, B15, +B1 / B7.
- Boundary capabilities:
 - 'authorised' increases from current 2008 up to 2012 from SYS.
 - Beyond 2014 establish pseudo reinforcements to maintain a near compliant system for the given background.
- Demand: as per SYS to 2015, and extrapolated after 2015.
- For CAP164 scenario, options
 - 1) advance x% of wind by y years starting in 2012 & a % of conventional by b years

⁹ see annex 5 of 'GBSQSS Consultation Document (Review for Onshore Intermittent Generation)'

Sub group to agree x, y, a & b, propose 50, 3, 25, 3 respectively

- 2) Advance specific projects in the merit order – how do we decide which and by how much

The comparison of pre and post CAP164 scenarios will provide a constrained volume and cost, broken down in to plant type and zone. The model will also provide the running hours for each plant type for each scenario, so derives the volume changes in each plant type i.e. what and how much runs and what it replaces. Combining this with a CO₂/T/MW for each plant type the overall carbon saving can be established. This can then be compared to the constraint cost also presented from the model.