WORKING GROUP REPORT

CUSC Amendment Proposal CAP143

Interim Transmission Entry Capacity (ITEC)

Prepared by the CAP143 Working Group
for submission to the Amendments Panel

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1 SUMMARY AND RECOMMENDATIONS

Executive Summary

1.1 CAP143 Interim Transmission Entry Capacity (ITEC) is intended to allow generation, that meets a number of eligibility criteria, to connect to the transmission system with access restrictions in advance of the completion of the wider transmission system reinforcement works required.

1.2 During the Working Group assessment, it became clear that the Original Amendment proposal was likely to lead to an inefficient access restriction, and therefore the Working Group developed one Working Group Alternative Amendment.

Working Group Recommendation

1.3 The Working Group believes its Terms of Reference have been completed and CAP143 has been fully considered. Opinions within the group were divided. Some members believed that the CAP143 Original better achieved the Applicable Objectives and some members did not; a majority of members believed that the Working Group Alternative better achieved the Applicable Objectives and a majority of the Working Group believed that the Alternative better meets the Applicable Objectives than the Original.

Voting Results	**Pro**	**Anti**
Original better than Baseline	5	8
Alternative better than Baseline	8	5
Alternative better than Original	9	0*

* Four Working Group members abstained from voting on the preferred option, on the grounds that neither the Original nor the Alternative better achieves the Applicable Objectives.

1.4 Details of those Working Group members that participated in the voting process are included in Annex 7.

1.5 By a majority (9:4), Working Group members recommended that the Working Group Alternative better achieved the Applicable Objectives than the baseline. Therefore the Working Group recommends to the CUSC Panel that:

- A consultation report containing both CAP143 Original and the CAP143 Working Group Alternative should proceed to wider Industry Consultation as soon as possible.
- The Working Group report is accepted by the CUSC Panel and the Working Group is disbanded.

2 PURPOSE AND INTRODUCTION

2.1 This Report summarises the deliberations of the Working Group and describes the Original CAP143 Amendment Proposal as well as the Working Group Alternative.

2.2 CAP143 was proposed by SSE Generation Limited and submitted to the Amendments Panel for their consideration on 15 December 2006. The Amendments Panel determined that the proposal should be considered by a

Working Group and that the Group should report back to the panel meeting within 3 months.

2.3 The Working Group met on 11 January 2007, and the members accepted the Terms of Reference for CAP143. A copy of the Terms of Reference is provided in Annex 3. The Working Group considered the issues raised by the Amendment Proposal and considered whether the Proposal and the Working Group Alternative better facilitated the Applicable CUSC Objectives.

2.4 This Working Group 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/, along with the Amendment Proposal Form.

3 PROPOSED AMENDMENT

3.1 This section describes the concept and process associated with the proposed amendment and is based on the amendment proposal form contained in Annex 5. During working group discussions, a number of areas have been clarified, and this section reflects these discussions.

3.2 The proposed amendment suggested a fixed number of hours of access restriction which would be placed in the CUSC and apply to all holders of the product. The Working Group have agreed that this would lead to an access restriction that was not efficient and therefore an alternative to the original amendment proposal has been developed that would better meet the applicable objectives. These changes are recorded as Working Group Alternative Amendment in section 5.

Summary

3.3 The intention of Interim Transmission Entry Capacity (ITEC) is to allow generation that meets a number of pre-defined conditions to connect to the transmission system with restricted access rights in advance of the completion of all necessary transmission system reinforcements.

3.4 From a project developer's point of view, ITEC has advantages over other short-term products or short-term trading (if implemented) because it offers certainty over the number of hours of access available in any year and allows projects to be financed.

3.5 The Working Group contrasted ITEC with the other short-term access products that are currently available to users. Applications for Short term TEC (STTEC) and Limited Duration TEC (LDTEC) are subject to a within year assessment against the operational criteria contained in the GB Security and Quality of Supply Standard (SQSS). STTEC and LDTEC are released by the SO when doing so does not introduce new or exacerbate existing constraints. Once released, STTEC and LDTEC provide the holder with the same rights as holders of Transmission Entry Capacity (TEC). These products are effectively designed to release any spare capacity available in operational timescales. The working group agreed that the release of ITEC would mean that there would be less STTEC and LDTEC available.

Background

3.6 National Grid and the other Transmission Owners (TOs) consider applications for TEC against the planning criteria set out in the SQSS. The planning criteria include:

- Deterministic rules, which allow the minimum transmission capacity required to be established; and
- Economic criteria, which allow design to a higher standard provided this can be economically justified.

Where the assessment of a TEC application against the SQSS planning criteria identifies a requirement for reinforcement of the transmission system, the connection is made contingent on the prior completion of these reinforcements.

3.7 Once granted by the System Operator (SO), TEC provides the holder with a contractual right to export up to a defined level of MW at any time. If the SO is unable to honour this right, compensation is payable to the holder. In the case of an interruption as a result of deenergisation of part of the transmission system, this compensation is as described in section 5.10 of the CUSC, whereas for all other transmission constraints, Balancing Services are used.

3.8 The cost of resolving transmission constraints forms part of the Balancing Services Incentive Scheme (BSIS) which incentivises the SO to minimise these costs. All transmission system users pay for the cost of this activity and for any incentivised payment/receipts through non-locational Balancing Services Use of System (BSUoS) charges.

Concept

3.9 The assumption behind ITEC is that the SQSS planning criteria assessment which has led to a requirement for wider transmission system reinforcements is based on system conditions at certain times (e.g. at peak demand). If this were the case, then access would be available at other times of the year and ITEC is designed to allow certain users to take advantage of this access.

3.10 In order to avoid an impact on other users, ITEC has been designed such that the holder is not able to generate or receive compensation during certain times (e.g. at peak demand). For the remainder of the year, holders of ITEC have the same rights and obligations as holders of TEC, thus facilitating earlier connection to the transmission system for certain projects that are conditional on the completion of wider transmission reinforcements.

3.11 The Working Group agreed that outside the period that access restrictions apply, the ITEC holder's rights include rights to compensation as described in section 5.10 of the CUSC for an interruption as a result of deenergisation of part of the transmission system or Balancing Services for all other transmission constraints. The Working Group also agreed that the ITEC holder's obligations would include a requirement to pay Transmission Network Use of System (TNUoS) charges and Balancing System Use of System charges (BSUoS) and to be fully compliant with the Grid Code.

3.12 The use of ITEC will be limited to users that meet a number of pre-defined conditions. These limitations have been included to restrict the uptake of ITEC in order to avoid an adverse impact on other transmission system users.

3.13 The SO is provided with certainty regarding the duration of ITEC, since from the time of allocation it continues to be available to the user until the Completion Date, when it is replaced by TEC.

Definition

3.14 ITEC will be available on request to users that meet the following conditions:

- User has a Bilateral Agreement (Bilateral Connection Agreement [BCA] or Bilateral Embedded Generation Agreement [BEGA]) with National Grid;
- The TEC specified in the bilateral agreement is contingent on the completion of a number of transmission system reinforcements, for which all of the necessary statutory consents (i.e. consent under the Town and Country Planning Acts and/or any consent needed under section 37 of the Electricity Act 1989) have been granted; and
- User has all necessary statutory consents (i.e. consent under the Town and Country Planning Acts and/or any consents needed under section 36 of the Electricity Act 1989) for the power station.

Once the conditions listed above have been met, ITEC will continue to be available to the holder until such time as the holder receives TEC.

3.15 The Working Group questioned the treatment of examples in which projects had been 'clustered' such that one or more of the transmission reinforcements listed in the Construction Agreement are not required to allow the user to connect to and use the transmission system. The Working Group noted that since all reinforcements listed in the Construction Agreement require consents prior to the use of ITEC, the release of ITEC to these projects may be later than necessary.

3.16 ITEC provides the holder with a contractual right to export up to a defined level of MW on the following basis:

- The defined level of ITEC is less than or equal to the level of TEC (in MW) contained in the bilateral agreement; and
- The SO is able to request that the generation output is reduced (potentially to zero) with no compensation payable for a fixed number of hours (X) per year. The original amendment assumed that a fixed value of X would be inserted into the CUSC and would apply to all holders of ITEC.

3.17 The Working Group questioned the treatment of staged applications for TEC. National Grid presented examples of staged applications for TEC, which showed the level of ITEC available at each stage. The details of this presentation are included in Annex 6a (England & Wales Staged Projects). The Working Group agreed that the level of ITEC should be less than or equal to the incremental TEC (in MW) that is contingent on a particular set of reinforcements. The Working Group also agreed that the level of TEC + STTEC + LDTEC + ITEC held by a power station must not exceed the power station CEC.

3.18 The Working Group agreed that ITEC could not be traded.

Process

3.19 The applications received for TEC are processed by the SO on a 'first-come-first-served' basis. Where an assessment against the SQSS planning criteria leads to a requirement for transmission system reinforcements, these reinforcements are listed in an appendix to the Construction Agreement and the Completion Date is delayed until the completion of the reinforcements.

3.20 When the transmission reinforcement works required to facilitate the connection of a user are complete and the transmission reinforcement works required for wider system reasons have received the necessary statutory consents, ITEC is available to the user on request. The amendment proposal was silent on the need for the SO and relevant TOs to revisit all valid construction agreements and differentiate those transmission reinforcement works which are required to facilitate a connection to the transmission system from those that are required for wider system reasons.

3.21 The original amendment assumed that the SO would perform an assessment against the operational criteria contained in the SQSS to determine a fixed value of X that would be inserted into the CUSC and apply to all holders of ITEC.

3.22 The original amendment was silent on how the SO could exercise its rights to reduce the output of a power station with ITEC without compensation.

3.23 The original amendment was silent on how and in what timescales the SO would exercise its right to restrict the generator output.

4 SUMMARY OF WORKING GROUP DISCUSSIONS

4.1 This section summarises the main points of Working Group discussion. The main topics of discussion are:

- Eligibility for ITEC;
- Definition of local and wider works;
- Assessment of the potential use of ITEC;
- Allocation of ITEC;
- Application and determination of X;
- Interaction between ITEC and TEC, LDTEC and STTEC;
- ITEC and Final Sums Liability;
- Process Issues.

4.2 As described in section 3 above, the Working Group discussions have led the Working Group to agree an alternative to the original amendment proposal that would better meet the applicable objectives. These changes are recorded as a Working Group Alternative Amendment in section 5.

Eligibility for ITEC

4.3 The Working Group discussed which users would be eligible to apply for and use ITEC. One Working Group member questioned whether limiting the availability of ITEC to those that meet particular pre-qualification criteria was discriminatory. Other Working Group members believed that since everyone has the option to apply for an increase in TEC (and therefore could qualify for ITEC if the conditions are met), this is not discriminatory.

4.4 The Working Group agreed that eligibility criteria were required for ITEC and that the criteria detailed in the amendment proposal to make an application for ITEC were appropriate, i.e.:

- The user has signed an agreement (Bilateral Connection Agreement or Bilateral Embedded Generation Agreement) for an increase in TEC in the future; and
- The TEC specified in the bilateral agreement is contingent on the completion of a number of transmission system reinforcements, for which all of the necessary statutory consents (i.e. consent under the Town and Country Planning Acts and/or any consent needed under section 37 of the Electricity Act 1989) have been granted; and
- The user has all necessary statutory consents (i.e. consent under the Town and Country Planning Acts and/or any consents needed under section 36 of the Electricity Act 1989) for the power station.

4.5 The Working Group discussed whether ITEC should only be available when the necessary statutory consents for the wider transmission reinforcements have been granted or whether the SO should contractually commit to a date when the granting of these consents is anticipated. The Working Group agreed that the main advantage of a contractually firm ITEC date is the provision of certainty to the developer, allowing construction in advance and therefore maximising the potential use of ITEC. The Working Group also agreed that the main disadvantage with this approach would be the risk of additional constraint costs if consents were not granted by the anticipated date. The Working Group were concerned that this would lead to a conservative contractual date being set which could limit the use of ITEC.

4.6 The Working Group agreed that the risk of additional constraint costs associated with a contractually firm date was unacceptable, and therefore the eligibility criteria to use ITEC detailed in the amendment proposal were agreed as appropriate, i.e.:

- The user has signed an agreement (Bilateral Connection Agreement or Bilateral Embedded Generation Agreement) for an increase in TEC in the future; and
- The TEC specified in the bilateral agreement is contingent on the completion of a number of local transmission system reinforcements, which are complete; and
- The TEC specified in the bilateral agreement is contingent on the completion of a number of wider transmission system reinforcements, for which all of the necessary statutory consents (i.e. consent under the Town and Country Planning Acts and/or any consent needed under section 37 of the Electricity Act 1989) have been granted; and
- The user has all necessary statutory consents (i.e. consent under the Town and Country Planning Acts and/or any consents needed under section 36 of the Electricity Act 1989) for the power station.

Definition of Local and Wider Construction Works

4.7 The Working Group discussed the definition of Local and Wider Construction Works. The simplest definition of Local Construction Works is "those works required to establish a connection to the main interconnected transmission system" however, if there is export capacity available at the point of connection, further works would be required in order to allow the new power station to export. The Working Group agreed that minimising the scope of Local Construction Works increases the opportunities for ITEC to be used but also increases the associated likely value of X.

4.8 The following scenarios were discussed:

- An ITEC holder connecting at an existing entry substation.
  In this example, the Local Construction Works would be limited to extending the substation to provide a connection to the potential holder of ITEC. The number of hours of restriction (X) would be increased by the lack of any wider reinforcements, but could be increased further depending on the load factor of the other generation connected at the entry substation.
- An ITEC holder is the only party connecting to a new remote substation which requires a new line to connect it to the remainder of the transmission system.
  In this example, the Local Construction Works need to include the construction of the remote substation and the new line as a minimum. If there is no export capacity from the point of connection for the new line, ITEC will not be useable, and therefore further reinforcement works may be required.
- An ITEC holder is the only party connecting at a new remote substation which requires a new line to connect it to a "hub" at which other new generators are expected to connect. The "hub" also requires a new line to connect it to the remainder of the transmission system.
  In this example, the Local Construction Works need to include as a minimum: the construction of the remote substation; the new line to the remote substation; the construction of at least part of the "hub" substation and the construction of the new line to connect the new "hub" substation. As with the examples above, if there is no export capacity from the point of connection for the new line from the "hub", ITEC will not be useable and therefore further reinforcement works may be required.

4.9 Given that a definition that would lead to an optimal solution at all locations is not possible, the Working Group agreed that Local Construction Works should be defined as "those works required to allow the ITEC holder to be fully compliant with the requirements of the Grid Code and generate up to the full value of ITEC for one hour in a year under reasonably foreseen circumstances". The Working Group stressed that an ITEC holder must have the same Grid Code obligations as a holder of TEC.

Assessment of potential use of ITEC

4.10 The Working Group agreed that the factors affecting whether a local connection could be accelerated include:

- Impact on other developers;
- Whether a change to the original design is required;
- Ability to gain the necessary consents in necessary timescales;
- Ability to procure key plant items in necessary timescales;
- Ability to reallocate manpower resource, both internal staff and external contractors;
- Securing an outage window to undertake transmission connection and / or related infrastructure works;
- Being able to put in place the necessary funding (i.e. availability of capex funding through TPCR or DPCR) and / or security.

4.11 National Grid stated that for the limited number of examples investigated, the opportunities to advance Local Construction Works to provide an opportunity for users to make use of ITEC were very limited.

4.12 The Working Group considered the potential use of ITEC as the volume of new and additional generation connecting to the GB transmission system on the basis of information contained in the GB SYS. This information is included in Annex 6d (Potential use of ITEC), along with the consents status for new generation projects in each of the three TO regions as at March 2007, which provides an indication of the potential volume of applications for ITEC in the more immediate future.

4.13 The Working Group agreed that this analysis indicates a very large pool of potential ITEC users.

Allocation of ITEC

4.14 The amendment proposal stated that ITEC would be allocated to those that meet the pre-qualification criteria up to the level of incremental TEC (in MW) requested in the Bilateral Connection Agreement with a number of hours of restriction (X) fixed in the CUSC. The Working Group agreed that any assessment of a generic, fixed value of X would be inefficient and therefore likely to lead to a value of X that made ITEC unattractive.

4.15 The working group also agreed that ITEC should only be allocated up to the lower of TEC or CEC. The working group also agreed that for staged offers, the level of ITEC available for a particular stage should be limited to the TEC associated with that stage. National Grid presented examples of staged connection offers in England and Wales and showed the level of ITEC available at each stage. This presentation is described in Annex 6a (England & Wales Staged Projects).

4.16 The Working Group discussed a number of alternative methodologies for the allocation of ITEC.

4.17 For the first alternative (A), the level of ITEC requested (in MW) was equal to the level of TEC in the Bilateral Connection Agreement with X allocated based on a particular methodology. The Working Group agreed that the advantages associated with this were based on the certainty provided to the user regarding the capacity available. The Working Group also agreed that the disadvantages associated with this include an unattractive value of X in circumstances where there is limited spare capacity due to the capacity

available being fixed and the difficulties associated with choosing which ITEC user to constrain when price is not a differentiator.

4.18 The following methodologies for allocating X associated with this alternative were considered:

A1 X is calculated and offered based on those that express an interest during a particular application window.
The Working Group agreed that the advantages of this option include the minimised SO assessment and the certainty of the value of X at the offer stage, which allows the user's decision to accept or reject to be based on the actual value of X.
The Working Group also agreed that the main disadvantage of this option was that the value of X would be inefficient in all cases where fewer users accept.

A2 X is calculated and offered based on those that express an interest during a particular application window. X is then recalculated based on those that accept.
The Working Group agreed that the advantages of this option include a relatively straightforward SO assessment and process and a more efficient value of X, where the efficiency is dependent only upon the granularity (in MW TEC terms) of the projects that accept.
The Working Group also agreed that the disadvantage of this option was that the user's decision not to accept an offer for ITEC would not be based on the final value of X.

A3 The SO identifies a supply curve (MW vs X) and a cleared auction is held based on the range of values of X the user is prepared to accept.
The Working Group agreed that the advantage of this option was that the efficiency of the value of X was dependent only upon the granularity (in MW TEC terms) of the projects that accept.
The Working Group also agreed that the main disadvantage of this option is that a more complicated resource intensive SO assessment is required. For each location, X would need to be calculated for a sufficient number of MW levels to allow a supply curve to be produced.

4.19 For the next alternative (B), the SO would identify blocks of capacity (in MW) with an associated level of X that could be released. The Working Group agreed that the advantage of this alternative is a more efficient use of spare capacity, provided a reasonably small MW block size is used. The Working Group also agreed that the disadvantages associated with this include that the block size (in MW) released may be considerably lower than the power station TEC, the determination of the block size (in MW) by the SO would not be transparent and, as with the previous alternative, there are difficulties associated with choosing which ITEC user to constrain when price is not a differentiator.

4.20 The following methodologies for allocating X associated with this alternative were considered:

B1 Blocks are allocated to those that express an interest on a first-come-first-served basis.
The Working Group agreed that the main advantage of this option was the simplicity of the process.
The Working Group also agreed that the main disadvantage of this option was the fact that the allocation would effectively be based on a contract race.

B2 Blocks are allocated to those that express an interest with the capacity (in MW) pro-rated to match supply and demand.

The Working Group agreed that, as with the first option, the main advantage of this option was the simplicity of the process.
The Working Group also agreed that the disadvantages of this option include that if spare capacity is over-subscribed, the pro-rating of capacity will make ITEC unattractive and that pro-rating could result in no user receiving sufficient ITEC to proceed.

B3 Blocks are offered to those that express an interest with the capacity (in MW) pro-rated to match supply and demand. The pro-rating is then repeated based on those that accept their ITEC offers.
The Working Group agreed that this option had the advantage of providing a more efficient use of spare transmission capacity.
The Working Group also agreed that the disadvantages of this option include the fact that the user decision not to accept an offer for ITEC is not based on the final capacity (in MW) and X values and, as with the previous option, pro-rating could result in no user receiving sufficient ITEC to proceed.

B4 Blocks are allocated based on a pay-as-bid auction.
The Working Group agreed that the advantages of this option are that it means that spare capacity is used efficiently and goes to those that value it the most.
The Working Group also agreed that the main disadvantage with this option was the significant complexity associated with developing effective auction rules.

4.21 For the final alternative (C), the SO would identify a profile of access available (MW and hours) that could be released. The Working Group agreed that the advantages of this alternative are that additional information is provided to the user in advance to facilitate a more efficient decision and that the problem of not knowing who to constrain where price is not a differentiator is avoided. The Working Group also agreed that the main disadvantage associated with this is that the lower flexibility available to the SO may lead to a less efficient use of spare capacity.

4.22 The following methodologies for allocating X associated with this alternative were considered:

C1 The profile (MW and hours) is allocated to those that express an interest on a first-come-first-served basis.
The Working Group agreed that the main advantage of this option was the simplicity of the process.
The Working Group also agreed that the main disadvantage of this option was the fact that the allocation would effectively be based on a contract race.

C2 The profile is allocated to those that express an interest with the capacity (in MW) pro-rated to match supply and demand.
The Working Group agreed that, as with the first option, the main advantage of this option was the simplicity of the process.
The Working Group also agreed that the disadvantages of this option include that if spare capacity is over-subscribed, the pro-rating of capacity will make ITEC unattractive and that pro-rating could result in no user receiving sufficient ITEC to proceed.

C3 The profile is allocated to those that express an interest with the capacity (in MW) pro-rated to match supply and demand. The pro-rating is then repeated based on those that accept their ITEC offers.
The Working Group agreed that this option had the advantage of providing a more efficient use of spare transmission capacity.
The Working Group also agreed that the disadvantages of this option include the fact that the user decision not to accept an offer for ITEC is

not based on the final capacity (in MW) and, as with the previous option, pro-rating could result in no user receiving sufficient ITEC to proceed.

C4 The profile is allocated based on a pay-as-bid auction.
The Working Group agreed that the advantages of this option are that it means that spare capacity is used efficiently and goes to those that value it the most.
The Working Group also agreed that the main disadvantage with this option was the significant complexity associated with developing effective auction rules.

4.23 The Working Group was divided on which alternative would better meet the applicable CUSC objectives. Some Working Group members were prepared to support option A2. Other Working Group members were not prepared to support the other options as Working Group alternatives and therefore option A2 was agreed as the Working Group Alternative.

Application and Determination of X

4.24 National Grid presented both a theoretical and operational view of the determination and application of X. These presentations are described in Annex 6a (The determination and application of X – theoretical view) and Annex 6b (The determination and application of X – operational view).

4.25 The amendment proposal was silent on how an access restriction with no compensation would be achieved. The Working Group agreed that requiring the user to resubmit a Maximum Export Limit (MEL) of 0MW when requested by the SO would be appropriate.

4.26 The amendment proposal was silent on the means by which the hours of restriction (X) would be utilised by the SO. The Working Group agreed that the hours of restriction (X) would be used in settlement period (half hour) blocks. The Working Group also agreed that when an access restriction is notified by the SO, the user would always be required to reduce output to 0MW and that this must take place in time for the start of the settlement period. This may mean that the user has to initiate a reduction in output prior to the start of the settlement period due to particular plant dynamics.

4.27 The Working Group discussed the following models for the application of X:

- Model A: Curtailment 4 hours ahead of real time
  The Working Group agreed that the advantages of this model include a more efficient use of X, increased constraint capture, facilitation of the use of short-term opportunities and stimulation of greater liquidity for within day markets.
  The Working Group also agreed that the disadvantages of this model include more complex administrative arrangements; the introduction of a limited scope for gaming by portfolio players (i.e. if an ITEC holder is constrained a thermal plant owned by the same company would have time to increase their physical notification to exacerbate the constraint) and reduced ability for ITEC holders to trade out of their energy position.
  The Working Group noted that curtailment 4 hours ahead of real time was a minimum and where the SO was aware of a constraint further ahead of real time, then an increased notice period would be provided.
- Model B: Curtailment at day ahead
  The Working Group agreed that the advantages of this model include the provision of greater certainty to the ITEC holder and an increased opportunity for the ITEC holder to balance their energy position.

The Working Group also agreed that the disadvantages of this model include a poorer capture of constraints and a larger value of X used less efficiently.

- Model C: Curtailment at week ahead
- Model D: Curtailment at month ahead
  The Working Group agreed that the advantage of models C and D is the provision of greater certainty to the ITEC holder and the disadvantages are the poorer constraint capture and less efficient use of X.
- Model E: Curtailment at year ahead
  The Working Group agreed that the advantages of this model include the provision of the greatest certainty to the ITEC holder and it being the simplest for National Grid from an administrative point of view.
  The Working Group agreed that the disadvantages of this model include a larger value of X, used less efficiently and a poorer constraint capture.

4.28 The Working Group discussed the background against which the assessment to determine X would be performed. The majority of the Working Group agreed that in the situation where access rights were already sold out, the SO could only resell these access rights if there was cost neutrality for holders of TEC.

4.29 One Working Group member raised Ofgem's decision at the time of BETTA to allow the release of connection offers for new generation developments in Scotland without them being contingent on necessary reinforcements in England and Wales (Licence Condition C18). This Working Group member argued that, in making this decision, Ofgem must have accepted a level of constraint costs due to the Cheviot boundary and that therefore this boundary should be ignored during the assessment of ITEC. Other Working Group members agreed that any assessment of ITEC would need to be performed against National Grid's current licence conditions.

4.30 One Working Group member expressed an expectation that the conditions associated with the release of other short term products, STTEC and LDTEC, i.e. that release should not create new or exacerbate existing constraints should apply. National Grid explained that the only way to achieve 100% constraint capture with ITEC was with a value of X of 8760 hours. A number of Working Group members expressed concern with an approach that was not cost-neutral due to the impact on the BSUoS charges and imbalance prices to which all users are exposed.

4.31 The Working Group agreed that model A was the most appropriate because the additional implementation costs were easily outweighed by the increased constraint cost capture.

4.32 One Working Group member questioned whether the introduction of ITEC with model A would necessitate the SO carrying more reserve 4 hours out to cover the additional uncertainty. National Grid confirmed that they did not anticipate a material increase in the level of reserve required due to the availability of sufficient information to the SO in advance of this notice period.

4.33 One Working Group member also questioned whether the introduction of ITEC with model A would impact on imbalance prices. National Grid explained that if a holder of ITEC contracted with a supplier for energy and then had access curtailed, the ITEC holder would effectively have 2.5 hours to re-contract to avoid exposure to imbalance prices. If the ITEC holder was unable to re-contract, the imbalance volume would be increased, which

would increase the likelihood of having System Buy Price as the main price, impacting on all users.

Interaction between ITEC and TEC, LDTEC and STTEC

4.34 The Working Group discussed the interaction between ITEC, LDTEC, STTEC and TEC.

4.35 In considering the interaction between ITEC and LDTEC and STTEC, the Working Group was concerned that if ITEC were to be allocated automatically following a consent being granted, rather than being subject to an assessment process, this would be discriminatory. The Working Group agreed that this issue of discrimination is addressed by introducing an assessment process for ITEC. The Working Group agreed that the release of ITEC would reduce opportunities for users to make use of STTEC and LDTEC.

4.36 The Working Group also discussed scenarios in which the release of ITEC interacted with the release of TEC. The Working Group noted circumstances in which the existing transmission system could accommodate a small increase in export capacity (e.g. 20MW). A larger generation project would not be allowed to connect until the completion of transmission reinforcement works to increase the export capacity to at least 100MW. If a smaller generation project (less than or equal to 20MW) came along, this could be given TEC immediately. However, if ITEC was granted to the 100MW project until the completion of the transmission reinforcements, this would prevent the smaller project connecting with TEC. The Working Group agreed that since X is set prior to the release of ITEC, there is an interaction between ITEC and TEC.

4.37 The Working Group agreed that ITEC would have to be treated in the same way as TEC in the background to future assessments against the planning criteria contained in the SQSS in order to avoid additional constraint costs.

Breach of ITEC

4.38 The Working Group discussed the treatment of users that did not reduce output to 0MW when an access restriction is notified by the SO. The Working Group agreed that this should be treated the same as a breach of TEC (i.e. a breach of CUSC).

4.39 The Working Group also agreed that arrangements (similar to those in place for Transmission Related Agreements) should be introduced to ensure that if the access restriction had to subsequently be achieved with a bid/offer acceptance, any costs could be recovered from the user.

ITEC and Final Sums Liability

4.40 The Working Group agreed that Final Sums Liabilities were required to guard against the risk that transmission reinforcement works are completed to accommodate an increase in output from a power station but that the increase in output is not realised. The Working Group questioned whether it was appropriate for Final Sums Liabilities to remain in place if a power station was generating using ITEC, since the risk of increased output not being realised is removed. The Working Group agreed that Final Sums Liabilities should apply until the power station uses ITEC, and from then the power

station should be required to pay ITEC charges. The Working Group agreed that the date from which a power station uses ITEC may require definition.

4.41 The Working Group also noted a potential interaction between the introduction of ITEC and CAP131 (User Commitment for TEC Users). The Working Group agreed that, should CAP131 be approved, the profile of liabilities faced by holders of ITEC should be advanced such that the Completion Date is consistent with the date the user starts to use ITEC.

Other Process Issues

Eligibility

4.42 The Working Group agreed that a process for the TOs to identify and for the SO to notify users of:

- the statutory consents associated with each reinforcement listed in Construction Agreements;
- those reinforcements listed in Construction Agreements that are considered to be Local Construction Works;

would be required. The Working Group agreed that the process by which the SO notifies users should be detailed in the CUSC.

4.43 The Working Group agreed that the user should be responsible for identifying when the relevant user statutory consents have been granted.

4.44 The Working Group discussed the treatment of embedded generators with Bilateral Embedded Generator Agreements (BEGAs) seeking ITEC, where distribution and transmission reinforcement works are required. The Working Group agreed that the generator would be responsible for negotiating the completion of any distribution reinforcement works in the necessary timescales to allow ITEC to be used. One Working Group member expressed concern that all users could be exposed to constraint costs as a result of a DNO not completing the required distribution reinforcement works in time. National Grid explained that the Grid Code (BC1.6.1) states that generators must not submit BMU data that could result in the violation of a constraint on a distribution network.

4.45 The Working Group explored the scenario where distribution reinforcement works or local transmission reinforcement works are delayed following the allocation of ITEC. The Working Group agreed that since it was the user's responsibility to negotiate the timely completion of necessary distribution reinforcement works, it appeared appropriate that the delay to the completion of these works should be at the user's risk (the user would be paying charges for ITEC but would not be able to use it). In the case of a delay to the local transmission reinforcement works, again, it appeared appropriate that the delay to the completion of these works should be at the users risk. In this event, the user would be paying for ITEC but would be ineligible to use it, although they would be eligible for liquidated damages.

4.46 The Working Group agreed that there may be other solutions to these issues, but also agreed that such arrangements are beyond the scope of this amendment proposal.

Allocation

4.47 National Grid presented a proposed process for the allocation of ITEC and the details of this presentation can be found in Annex 6c (Process for accelerating a local connection for Interim TEC).

4.48 The Working Group questioned whether an annual assessment in May or June was appropriate. If a major reinforcement was granted consent immediately after this, those able to make an application for ITEC would have to wait until the following year, thus reducing the potential use of ITEC.

Modification Applications

4.49 The Working Group questioned the treatment of a user that has been granted ITEC submitting a Modification Application to delay the date TEC is required. The Working Group agreed that since the obligations associated with ITEC were the same as those for TEC, there would be no incentive for a user to delay the Completion Date, from which TEC is available.

5 WORKING GROUP ALTERNATIVE AMENDMENT

5.1 The differences between the original amendment proposal and the alternative developed by the Working Group are summarised in the table below.

	Original Amendment	**Working Group Alternative Amendment**
Definition of access restriction X hours	Fixed value applied to all holders of ITEC regardless of location. Inserted into CUSC.	Project specific value.
Definition of Local Construction Works	Not specified.	Those works required to allow the ITEC holder to be fully compliant with the requirements of the Grid Code and generate up to the full value of ITEC for one hour in a year under reasonably foreseen circumstances.
Allocation of ITEC	ITEC (MW) less than or equal to TEC released on request when eligibility criteria are met.	Allocation process for ITEC required. ITEC (MW) less than or equal to TEC. X calculated and offered based on those that express an interest during a particular application window. Assessments to take place annually in May or June. X recalculated based on those that accept.
Achieving access restriction without compensation	Not specified.	ITEC holder required to resubmit Maximum Export Limit of 0MW.
Utilisation of X by System Operator	Not specified.	X hours used in settlement period (half hour) blocks.

		Access restriction always to 0MW. Curtailment of access notified at least 4 hours ahead of real time. User must be at 0MW for start of settlement period (may need to start output reduction in advance due to plant dynamics)
Dealing with breach of access restriction	Not specified.	Treated as a breach of TEC (breach of CUSC). Arrangements in place to recover costs if bid/offer acceptance is subsequently used.
ITEC and Final Sums Liability	Not specified.	Final Sums Liability remains until user starts to use ITEC. User then pays ITEC charges.
Treatment of staged TEC agreements	Not specified.	ITEC (MW) available prior to a particular increase in TEC limited to the level of the particular TEC increase (MW)
Treatment of delays to distribution reinforcement works (for BEGAs) or Local Construction Works	Not specified.	User's risk. User is required to pay ITEC charge but unable to use it.

6 ASSESSMENT AGAINST APPLICABLE CUSC OBJECTIVES

Proposed Amendment

6.1 The assessment against the applicable CUSC objectives for both the original and alternative proposal are identified in the tables below:

Original Amendment Proposal

Efficient discharge of licence obligations / Efficient & Economic

Promotes	Demotes
• Potentially makes better use of the available transmission network capacity by providing a new access product which enables accelerated (and therefore additional) capacity rights to new generators. • May allow National Grid to further optimise the use of the transmission system and reduce the TNUoS costs to other generators.	• Less economic operation of the transmission system since X is insufficient to avoid all additional constraints. • Increased BSUoS costs (e.g. additional constraints which will arise as the result of an insufficient value of X) which would create a cross-subsidy between TNUoS and BSUoS. • Inefficient assessment of X due to

	mechanistic rules which do not reflect time or location. The value of X may therefore prove to be unattractive to the majority of potential users of ITEC. • High administrative costs and increased operational overheads for National Grid in managing constraints.

Facilitates Competition

Facilitates	Frustrates
• Provides the opportunity for greater generation in the market which would be expected to promote competition in the energy market and balancing mechanism. • Provides a route to market.	• High risk of increased BSUoS costs (e.g. additional constraints which may arise as the result of an insufficient value of X) which would create a cross-subsidy between TNUoS and BSUoS. • Since additional constraint costs are not targeted at those that cause them, this could be seen as subsidised entry which is detrimental to competition. • Short notice instructions to reduce output give limited opportunity to trade out of contractual position and therefore increase the risk of System Buy Price as the main price which would impact on all users. • Inefficient assessment of X due to mechanistic rules which do not reflect time or location. The value of X may therefore prove to be unattractive to the majority of potential users of ITEC. Some opportunities for existing short-term access products in future years could be removed. Allocation of ITEC on request may undermine other products such as LDTEC and STTEC.

Working Group Alternative Amendment Proposal

Efficient discharge of licence obligations / Efficient & Economic

Promotes	Demotes
• Potentially makes better use of the available transmission network capacity by providing a new access product which enables accelerated (and therefore additional) capacity rights to new generators. • May allow National Grid to further optimise the use of the transmission system and reduce the TNUoS costs to other generators.	• Less economic operation of the transmission system since X is insufficient to avoid all additional constraints. • Increased BSUoS costs (e.g. additional constraints which will arise as the result of an insufficient value of X) which would create a cross-subsidy between TNUoS and BSUoS. • Risk of inefficient value of X remains due to the difficulty associated with

	forecasting constraint costs greater than one year ahead. • High administrative costs and increased operational overheads for National Grid in managing constraints.

Facilitates Competition

Facilitates	**Frustrates**
• Provides the opportunity for greater generation in the market which would be expected to promote competition in the energy market and balancing mechanism. • Provides a route to market. • Transparent and optimised application process resulting in a more efficient assessment of X and a more useable product.	• High risk of increased BSUoS costs (e.g. additional constraints which may arise as the result of an insufficient value of X) which would create a cross-subsidy between TNUoS and BSUoS. • Since additional constraint costs are not targeted at those that cause them, this could be seen as subsidised entry which is detrimental to competition. • Short notice instructions to reduce output give limited opportunity to trade out of contractual position and therefore increase the risk of System Buy Price as the main price which would impact on all users. • Risk of inefficient value of X remains due to the difficulty associated with forecasting constraint costs greater than one year ahead.

7 PROPOSED IMPLEMENTATION

7.1 The Working Group recommends that CAP143 should be implemented 12 months after an Authority decision because of the time required to identify Local Construction Works and Statutory Consents from all the transmission reinforcements listed in all GB Construction Agreements.

7.2 One member of the Working Group proposed an alternative implementation timescale of three months after an Authority decision, on the grounds that not all construction agreements would need amending prior to the implementation of CAP143 as some users would not be eligible to apply for ITEC until significant works have been consented. The member agreed that all agreements would need modifying at some point (within 12 months) but not necessarily prior to implementation. The Working Group did not consider this as a viable alternative.

7.3 One member of the Working Group proposed that a speedier implementation could be facilitated by notifying potential ITEC users of their local construction works only upon receipt of their ITEC application. Again, this was not considered as a viable alternative by the Working Group on the grounds that this would be neither practical nor efficient.

8 IMPACT ON THE CUSC

8.1 The text required to give effect to the Original Proposal is attached as Part A of Annex 1 of this document.

8.2 The text required to give effect to the Working Group Alternative Amendment is attached as Part B of Annex 1 of this document.

9 IMPACT ON INDUSTRY DOCUMENTS

Impact on Core Industry Documents

9.1 CAP143 and its Working Group Alternative Amendment will have an impact on the Transmission Use of System Charging Methodology and Statement of Charges. National Grid have already discussed the issues associated with CAP143 at the Transmission Charging Methodologies Forum and will consult on the changes required should CAP143 be approved in due course.

9.2 CAP143 and its Working Group Alternative Amendment will have an impact upon the SO-TO Code. The STC Committee have been informed of the issues associated with CAP143. The STC Committee are currently reviewing the impact of CAP143 on the STC to identify the consequential changes required to back off CAP143 provisions within the STC. Any associated STC changes will be proposed and progressed in line with the STC Amendment Proposal process in accordance with Section B, paragraph 7.2.

9.3 CAP143 and its Working Group Alternative Amendment will have an impact on Balancing Code No 1 (BC1) of the Grid Code, in terms of the notification of operational restrictions following the decision by the SO to allocate X. This will be progressed in line with the Grid Code amendment process

9.4 CAP143 and its Working Group Alternative Amendment will have an impact on the GB SQSS. The release of ITEC will mean that the transmission system will no longer be compliant with the planning criteria contained in the GB SQSS. This could either be handled with the issue of further derogations against the requirements of the SQSS by Ofgem, or a permanent change to the SQSS.

Impact on other Industry Documents

9.5 CAP143 has no impact upon other Industry Documents.

ANNEX 1 – PROPOSED LEGAL TEXT TO MODIFY THE CUSC

Although badged as "Interim TEC", in essence this "product" is no different in its characteristics than TEC itself (charges, nature of the rights given, user's obligations to comply with bilateral agreements, CUSC, Grid Code, BSC etc.). The difference is that it is "advanced" i.e. a right to connect\export before all Construction Works identified as required are completed and so is subject, until those works are completed, to certain "operational restrictions" i.e. the export can be constrained to zero without cost for a certain period.

Under the Working Group Alternative Amendment

On that basis, "Interim TEC" is the term used for the purposes of the process in identifying the figure in MW that is available but that is then effectively the TEC in the Bilateral Agreement (staged if this is less than the final TEC) although, until the Construction Works are completed in full (the "Interim TEC Period"), the export is subject to restrictions.

The changes to the Bilateral Agreement and Construction Agreement to effect this (the "Interim TEC Offer") would be by agreement to vary the Bilateral Agreement and Construction Agreement as follows:

Bilateral Agreement

a) Need to add new definition of "Interim TEC Period" which will end on completion of all the Construction Works. It will start either on a specified date (where no construction works at all are required) or on completion of those "local construction works" (identified as construction works stage 1 in the Construction Agreement) (or "Completion Date Stage 1").

b) Where the level of Interim TEC granted\applied for is less than the TEC, need to amend Appendix C to reflect different levels of TEC.

c) Need to add new clause and associated definitions identifying the operational restrictions that will apply until the end of the Interim TEC Period. The user will also be required to enter into a "transmission related agreement" providing for recovery of any monies paid to constrain output in the event that it does not comply with its obligations to reduce export.

d) Provide that TEC cannot be traded\exchanged during the Interim TEC Period.

Construction Agreement

The Construction works will need to be reordered into stages, the first "stage" capturing the "local construction works" following completion of which the "operational notification" for TEC at the "interim" level will be issued, with a further operational notification for increased level of TEC (if that is the case) on completion of the remaining stages of Construction Works.

As the above will be done by "agreement to vary" its difficult to draft these provisions upfront into the proforma Bilateral Agreements and Construction Agreement (CUSC Schedule 2 Exhibits 1,2 and 3) but a mark-up of a Bilateral Connection Agreement (CUSC Schedule 2 Exhibit 1) showing how the provisions would look is included, together with an example of a staged Construction Agreement and a transmission related agreement in Annex 2. The Interim TEC Offer would effect the necessary variations to introduce the above changes into the Bilateral agreement and Construction Agreement.

In addition the proforma Construction Agreement (CUSC Schedule 2 Exhibit 3) will be amended to provide for a new appendix identifying and placing obligations in relation to the project specific "local construction works" and "statutory consents".

Original Amendment

Under the original proposal there is no assessment or offer process specific to Interim TEC as such. The initial offer of a Bilateral Agreement and Construction Agreement would identify as the Construction Works Stage 1, the local construction works, and the changes to the Bilateral Agreements and Construction Agreement (as proposed under the amendment to be introduced through the Interim TEC Offer) would effectively become standard in any offer of a Bilateral Agreement and Construction Agreement on the basis of 100 Operational Restriction Hours during the Interim TEC Period. The date from which Interim TEC was available would be derived from the date of completion of these works and the dates by which the Statutory Consents were obtained.

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

For legal text for the Original Proposed Amendment, see the change-marked BCA and Construction Agreement contained in Part B.

In the Construction Agreement, an amendment would be required to identify that the right to become operational is not solely subject to the completion of stage 1 works, but also consent for all other works.

Operational restrictions would be defined in the CUSC rather than the user specific BCA and the clauses relating to the assessment of Interim TEC requests and offers would be excluded.

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

Add new Paragraph [6.35] as follows and amend the contents page accordingly.

6.35 Interim TEC

6.35.1 Background

A **User** that is party to a **Bilateral Connection Agreement** or **Bilateral Embedded Generation Agreement** but where **Construction Works** are required to be completed prior to the **User's** connection to and\or use of the **GB Transmission System** may make an **Interim TEC Request** for **Interim TEC** in accordance with this Paragraph of the **CUSC**.

6.35.2 Interim TEC Request

6.35.2.1 An **Interim TEC Request** can only be made by a **User** when:

(i) The **User** has received confirmation in writing from **The Company** that **The Company** is satisfied that the **User** is in receipt of the necessary **Statutory Consents** that **User** requires [in respect of] [to enable it to construct [and operate]] the **Power Station**; and

(ii) The **User** has received confirmation in writing from **The Company** that **The Company** is in receipt of the necessary **Statutory Consents** that **The Company** requires [in respect of] [to enable it to construct [and operate]] the **Construction Works**.

6.35.2.2 A **User** cannot make another **Interim TEC Request** in respect of a **Bilateral Agreement** once it has accepted an **Interim TEC Offer** in respect of that **Bilateral Agreement**.

6.35.2.3 An **Interim TEC Request** must be made by email and confirmed by fax by completing the **Interim TEC Request Form**.

6.35.2.4 An **Interim TEC Request** shall not be deemed received by **The Company** until the **Interim TEC Request Fee** has been paid to **The Company**.

6.35.2.5 The level of **Interim TEC** requested shall not exceed the **Transmission Entry Capacity** specified in Appendix C of the **User's Bilateral Agreement [**less any other **Access Product]** and in the case of a **User** with a **Power Station** directly connected to the **GB Transmission System** shall not exceed the **Connection Entry Capacity** specified in the **User's Bilateral Connection Agreement**. Where a **User's Bilateral Agreement** already provides for staged **Transmission Entry Capacity** and **Connection Entry Capacity** the **Interim TEC** for each stage shall not exceed the **Transmission Entry Capacity** and **Connection Entry Capacity** for that stage.

6.35.3 Assessment and Offer

6.35.3.1 **The Company** may reject any **Interim TEC Request** that is not made in accordance with the provisions of this Paragraph 6.35.

6.35.3.2 **Interim TEC Requests** will be considered by **The Company** once a year. All **Interim TEC Requests** received prior to 1 May in any year will be assessed by **The Company** during June, July and August of that year and an **Interim TEC Offer** made to the relevant **User** by 1 September.

6.35.3.3 In the **Interim TEC Offer The Company** will identify the level of **Interim TEC** available to a **User**, the **Interim TEC Period,** whether the start of the **Interim TEC Period** is dependent on completion of **Local Construction Works** and the programme for these or if not the date for the start of the **Interim TEC Period** [and the programme for these], the **Interim TEC Operational Restrictions** and the **Operational Restriction Hours**.

6.35.3.4 Where more than one **Interim TEC Request** is being assessed, the **Operational Restriction Hours** shall be determined by considering all **Users** to whom an **Interim TEC Offer** is to be made.

6.35.3.5 The **Interim TEC Offer** shall be open for acceptance for a period of 10 [**Business Days]** from the date of the **Interim TEC Offer**. Acceptance of an **Interim TEC Offer** shall be made by executing and faxing back the accepted **Interim TEC Offer**. An **Interim TEC Offer** lapses if not accepted by the **User** within such period.

6.35.3.6 Should any **Interim TEC Offer** not be accepted then **The Company** will revise the **Operational Restriction Hours** available to the **User(s)** who have accepted their **Interim TEC Offer** accordingly.

Add following New Definitions in CUSC Section 11

"**Access Product**"	means the level of any **Temporary Received TEC** plus any **STTEC** or **LDTEC** less any **Temporary Donated TEC**;
"**Interim TEC**"	the level of **Transmission Entry Capacity** available to the **User** during the **Interim TEC Period**;
"**Interim TEC Period**"	the period prior to the date by which all the **Construction Works** required for the **User's** connection and\or use of the **GB Transmission System** will have been completed during which the **Interim TEC** is available;
"Interim TEC Offer"	is an offer made by **The Company** pursuant to Paragraph 6.35.3 amending the **User's Bilateral Agreement** and **Construction Agreement** to provide for **Interim TEC**;
"Interim TEC Operational Restrictions"	the provisions to apply during the **Interim TEC Period** whereby for the **Operation Restriction Hours** the **User** would be required by **The Company** to reduce its **Maximum Export Limit** to zero MW;

"Interim TEC Request"	means an application made by a **User** to advance the date at which its **Transmission Entry Capacity** is available **[**in full or in part] to a date prior to the date by which all the **Construction Works** required for the **User's** connection and\or use of the **GB Transmission System** will have been completed;
"Interim TEC Request Fee"	is the fee to be paid to **The Company** for an **Interim TEC Request** as detailed in the **Charging Statements**;
"Interim TEC Request Form"	is the form set out in Exhibit [XXX] to the **CUSC**;
"Local Construction Works"	means those elements of the **Construction Works** as specified in the relevant **Construction Agreement** [such works being those it is necessary to complete before the **User** could connect to and\or use the **GB Transmission System** at the **Interim TEC** for a minimum of one hour in each **Financial Year**];
"Operational Restriction Hours"	means the number of whole hours in each and every [**Financial Year**] specified by **The Company** in an **Interim TEC Offer**; [original proposal – means 100 whole hours in any [**Financial Year**]];
"Statutory Consents"	Means as appropriate consent under Section 36 or Section 37 of the Electricity Act 1989 or [planning permission granted under the Town and Country Planning Act 1990 or any amendment thereto] as more particularly specified in the relevant **Construction Agreement**;

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

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

BETWEEN

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

(2) [ ] a company registered in [ ] with number [ ] whose registered office is at [ ] ("**User**", which expression shall include its successors and/or permitted assigns)

WHEREAS

(A) Pursuant to the **Transmission Licence**, **The Company** is required to prepare a Connection and Use of System Code **(CUSC)** setting out the terms of the arrangements for connection to and use of the **GB Transmission System** and the provision of certain **Balancing Services**.

(B) The **User** has applied for [**Connection** to] [and use of] [**Modification** of its existing **Connection** to [and use of]] the **GB Transmission System** and pursuant to the **Transmission Licence The Company** is required to offer terms in this respect.

(C) The **User** has applied for connection [and use] in the capacity of a [ ] as set out in Paragraph 1.2.4 of the **CUSC**.

(D) **The Company** and the **User** are parties to the **CUSC Framework Agreement** (being an agreement by which the **CUSC** is made contractually binding between **CUSC Parties**).

(E) This **Bilateral Connection Agreement** is entered into pursuant to the **CUSC** and shall be read as being governed by it.

[(F) The parties are also on even date herewith entering into a **Construction Agreement**.]

NOW IT IS HEREBY AGREED as follows:

1. DEFINITIONS, INTERPRETATION AND CONSTRUCTION

Unless the subject matter or context otherwise requires or is inconsistent therewith, terms and expressions defined in Section 11 of the **CUSC** have the same meanings, interpretations or constructions in this **Bilateral Connection Agreement** [and the following terms and expressions shall have the meaning set out below:-

"Construction Agreement"	the agreement made between the parties of even date herewith for the carrying out of construction works;
"Charging Date"	as defined in the **Construction Agreement**.]
["**Completion Date Stage 1**"	as defined in the **Construction Agreement**.]
["**Completion Date Stage 2**"	as defined in the **Construction Agreement**.]

["**Gate Closure**"	shall have the meaning given to that term in the **Balancing and Settlement Code**.]
["**Interim TEC Period**"	[[**Completion Date Stage 1**] or [date] to **Completion Date Stage 2**]
["**Interim TEC Operational Restrictions**"	means those restrictions on the **User's [output]** as provided for in Clause 11.]
["**Operational Restriction Hours**"	means [ ] *not needed for original proposal as this definition would be included in the main body of the CUSC.*
["**Output Useable**"	shall have the meaning given to that term in the **Grid Code.**]
["**Transmission Related Agreement**"	means the agreement in the form in Schedule 1 to be entered into between the parties for the provision of and payment for **Balancing Services** in respect of **Bid Offer Acceptances** referred to in Clause 11.5.]

2. COMMENCEMENT

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

3. THE CONNECTION SITE AND TRANSMISSION CONNECTION ASSETS

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)*

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** – assumed this will be by ref to completion of **Construction Works Stage 1]** provided that during the

Interim TEC Period such use is subject to the **Interim TEC Operational Restrictions.]**

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** [,and the periods to which such **Transmission Entry Capacity** applies], 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 submitted by the **User** for each **Settlement Period**.

7.4 Notwithstanding any provisions in the **CUSC** relating to the trade or exchange of **Transmission Entry Capacity**, the **User** shall not be entitled to trade or exchange its **Transmission Entry Capacity** within the **Interim TEC 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. TERM

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**.

10. VARIATIONS

10.1 Subject to Clause 10.2, 10.3 and 10.4 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**.

10.2 **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.

10.3 **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**.

10.4 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**.

11. INTERIM TEC OPERATIONAL RESTRICTIONS

11.1 During the **Interim TEC Period** the following operational restrictions will apply.

11.2 Subject to Clause 11.8 below, **The Company** shall be entitled on giving as much notice as reasonably practicable but in any event notice of no less than 3 hours prior to the **Gate Closure** of a **Settlement Period**, to which such notice applies to require the **User's Maximum Export Level** for such **Settlement Period** to be at zero MW. [The form and means of such notification shall be agreed between the parties.]

11.3 Where a notice is given to the **User** by **The Company** pursuant to Clause 11.2 above, the **User** shall:,

11.3.1 acknowledge receipt of such notification and where practicable shall revise its **Output Useable** forecast accordingly; and

11.3.2 in such time before **Gate Closure** for that **Settlement Period** as to ensure that the **Maximum Export Level** is at zero MW at the start of the **Settlement Period** submit a **Maximum Export Limit** of zero [for the relevant **BM Units**] at the **Power Station** for the **Settlement Period**; and

11.3.3 the **User** shall not operate its **Plant** and **Equipment** in excess of such **Maximum Export Limit** during that **Settlement Period**.

11.4 The **Company** shall promptly notify the **User** when the operational restrictions will or have ceased.

11.5 In the event that the **User** does not comply with Clause 11.3 above, **The Company** shall issue **Bid-Offer Acceptances** to the **User** to reduce the export from the **BM Unit** at the **Power Station** to zero MW for such [**Settlement Periods**] and the provisions of the **Transmission Related Agreement** shall apply.

11.6 Where the **User** becomes aware of or is notified by **The Company** of any breach of Clause 11.3 above the **User** shall forthwith take all reasonable steps to comply with the provisions of that Clause.

11.7 Where the **User** breaches in whole or in part the provisions of Clause 11.3 above the **User** shall at **The Company's** request explain to **The Company's** satisfaction 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** 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**.

11.8 If within 3 months of a breach of Clause 11.3 above that entitled **The Company** to take action under Clause 11.7 above, the **User** has still failed to provide the explanation and\or demonstration required by **The Company** in terms of that Clause 11.7, 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 forthwith 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.

11.9 To the extent that the **User** will not be able to export to or take demand from the **GB Transmission System** during the period of the operational restrictions the **User** acknowledges and agrees that **The Company** is relieved from its obligations to the **User** under **CUSC** Paragraphs 2.3 and 2.4.

11.10 These operational restrictions shall not exceed the **Operational Restriction Hours** in any financial year, relating to the **Operational Restriction Hours** relevant to that [**Financial Year**].

12. GENERAL PROVISIONS

~~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 **Bilateral Connection Agreement** shall not take effect or shall cease to have effect:~~

~~11.4.1 if a copy of this **Bilateral Connection Agreement** is not provided to the Department of Trade and Industry ("**DTI**") within 28 days of the date of this **Bilateral Connection Agreement**; or~~

~~11.4.2 if, within 28 days of the provision of that copy to the **DTI**, the **DTI** gives notice of objection to the party providing it.~~

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 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) during the Interim TEC Period and thereafter x 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

[ ] TEC (MW) during the Interim TEC Period and thereafter [ ] TEC (MW)

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

Add a new Exhibit [XXX] and amend the contents page accordingly.

CUSC – EXHIBIT [XXX]

THE CONNECTION AND USE OF SYSTEM CODE – INTERIM TEC REQUEST FORM

DIRECTLY CONNECTED POWER STATION

EMBEDDED POWER STATION

INTERCONNECTOR OWNER

DISTRIBUTION INTERCONNECTOR

Please study the following notes before completing and signing the Temporary TEC Exchange Rate Request Form.

1. National Grid Electricity Transmission plc ("**The Company**") requires the information requested in this form for the purposes of considering and assessing whether or not to grant your **Interim TEC Request**. It is essential that you supply all information requested and provides all the confirmations required and that every effort should be made to ensure that such information and confirmations are accurate.

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

2. Where **The Company** considers that any information provided by the **User** is incomplete or unclear then **The Company** will reject the **Interim TEC Request**.

3. The **User** may not make any change to the information provided.

4. **The Company** shall charge the **User**, and the **User** shall pay to **The Company** the **Interim TEC Request Fee**. The fee will be charged by **The Company** in accordance with the **Charging Statements**. No **Interim TEC Request** will be considered until such payment has been received.

5. Please note that an **Interim TEC Request** cannot be made until the criteria in **CUSC** Paragraph 6.35.2.1 have been met.

6. Please note that applications for **Interim TEC** will only be considered and **Interim TEC Offers** made once a year and have to be received by 1 May to be considered in that year.

7. Please complete this form and email it to [ ] and fax it to [ ].

REQUEST FOR INTERIM TEC

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

A1. Details of User

Name:

Address:

Fax No.:

Email Address:

Registered Number:

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

……

B1. Bilateral Agreement details

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

……

C1. Connection Site

Please detail the **Connection Site** or site of **Connection** to which the **Interim TEC Request** relates.

……

D. Interim TEC Period

Please provide the dates from which you would wish the **Interim TEC** to be available

……

E. Level of Interim TEC

Please provide details of the preferred level (in whole MW) of **Interim TEC**.

[……..] MW (Positive only)

Is this the same as the **Transmission Entry Capacity** specified in the **Bilateral Agreement**?

……...

Interim TEC Request Form

1. We agree to pay the **Interim TEC Request Fee**.

2. We confirm that the data submissions in respect of our **Connection Site** or site of **Connection** under the **Grid Code** are complete, accurate and up to date.

3. We confirm that the criteria in **CUSC** Paragraph 6.35.2. 1 have been met.

Signed for and on behalf of the:

User

……

Amendments to CUSC Schedule 2 Exhibit 3 – Construction Agreement

In Clause 1 of the Construction Agreement add new definitions as follows:

Local Construction Works	means those elements of the **Construction Works** as specified in Appendix [S] Part 1.
Statutory Consents	means those **Consents** specified in Appendix [S] Part 2.

Add new Appendix [S] as attached and amend the contents page accordingly.

Add the following new Clauses to Clause 2 of the Construction Agreement:

2.[x] Each party shall advise the other in writing once it is in receipt of each of its **Statutory Consents**. **The Company** shall advise the **User** as soon as practicable after receiving such confirmation from the **User** on the last of its **Statutory Consents** that **The Company** is satisfied for the purposes of **CUSC** Paragraph 6.35.2.1(i).

2.[X] In the event of a change in the **Construction Works** or **Construction Programme** or the **User's Works The Company** shall be entitled to revise the **Local Construction Works** and **Statutory Consents** as necessary to reflect such change.

Amend Clause 15.3 to include reference to Clause 2.[x]

Appendix [S]

LOCAL CONSTRUCTION WORKS AND STATUTORY CONSENTS

Part 1 **Local Construction Works**

Part 2 **Statutory Consents**

a) **Statutory Consents** for the [**User's Works**]

b) **Statutory Consents** for the [**Construction Works**]

ANNEX 2 – EXAMPLE OF A STAGED CONSTRUCTION AGREEMENT AND A TRANSMISSION RELATED AGREEMENT

DATED 200

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

and

[ ] **(2)**

THE CONNECTION AND USE OF SYSTEM CODE

CONSTRUCTION AGREEMENT

in respect of

[ ]

Ref:

CONTENTS

THIS CONSTRUCTION AGREEMENT is made on the day of 2007

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.

(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 construction 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. 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 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.
"Bilateral Connection Agreement"	the **Bilateral Connection Agreement** entered into between the parties on even date herewith in respect of [ ].

"Charging Date Stage 1"	the date upon which the **Construction Works Stage 1** are first **Commissioned** and available for use by the **User** or if the **Independent Engineer** before, on or after the relevant **Commissioning Programme Commencement Date** shall have certified in writing that the **Transmission Connection Assets Stage 1**, are completed to a stage where **The Company** could commence commissioning and by such date the **User's Works Stage 1** shall not have been so certified then the date falling 14 days after the date of such certification, provided that the **Transmission Reinforcement Works Stage 1** are **Commissioned** and relevant **Seven Year Statement Works** are completed as at that date. In the event that the **Transmission Reinforcement Works Stage 1** are not so **Commissioned** and/or the relevant **Seven Year Statement Works** are not so completed the **Charging Date Stage 1** shall be the date on which they are **Commissioned** and/or completed as appropriate.
"Commissioning Programmes"	the sequence of operations/tests necessary to connect the **User's Works** and the **Construction Works** to the **GB Transmission System** for each stage of the works for the purpose of making the **User's Works** available for connection and operation at the relevant **Transmission Entry Capacity** from the **Completion Date Stage 1** and **Completion Date Stage 2** in each case to be determined pursuant to Clause 2.10 of this **Construction Agreement**.
"Commissioning Programme Commencement Date"	the date specified in the **Construction Programme** for the commencement of the **Commissioning Programme** for each stage or any substituted date fixed under the terms of this **Construction Agreement**.
"Common Reinforcement Works"	the **Common Reinforcement Works Stage 1** and **Common Reinforcement Works Stage 2**.

"Common Reinforcement Works Stage 1"	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 relevant **Transmission Entry Capacity** and which are specified in Appendix H (Stage 1) Part 1.3.
"Common Reinforcement Works Stage 2"	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 relevant **Transmission Entry Capacity** and which are specified in Appendix H (Stage 2) Part 1.3.
"Completion Date Stage 1"	the date specified as such in the **Construction Programme** or such other date as may be agreed in terms of this **Construction Agreement** for completion of the **Construction Works Stage 1**.
"Completion Date Stage 2"	the date specified as such in the **Construction Programme** or such other date as may be agreed in terms of this **Construction Agreement** for completion of the **Construction Works Stage 2**.
"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** and the **Common Reinforcement 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 **Common Reinforcement Works** and for commencement and carrying on of any activity proposed to be undertaken at or from such **Works** and **Common Reinforcement 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 this **Construction Agreement**.
"Construction Works"	the **Construction Works Stage 1** and the **Construction Works Stage 2**.
"Construction Works Stage 1"	the **Transmission Connection Asset Works, Transmission Reinforcement Works Stage 1,** relevant **Seven Year Statement Works** and **One Off Works** and such additional works as are required in order to comply with any relevant **Consents** relating to any such works but excluding for the avoidance of doubt any **Third Party Works**.
"Construction Works Stage 2"	the **Transmission Reinforcement Works Stage 2**, relevant **Seven Year Statement 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 sum of **Sole User Final Sums** and **Shared User Final Sums** . Any dispute as to the amount

	of **Final Sums** shall be referred to arbitration in accordance with the **Dispute Resolution Procedure**.
"Independent Engineer"	the engineer specified in Appendix L to this **Construction Agreement.** Provided that:- (a) where the parties fail to agree on a suitable engineer within 120 days of the date of this **Construction Agreement** (or such later date as the parties may agree); 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**.
"Interface Agreements"	the agreements substantially in the form of **CUSC** Exhibit 0 Part IA and/or Part IIA to be entered into by the parties pursuant to Clause 2.14.
"Land"	an area of land in a position reasonably required by **The Company** and of an area sufficient in **The Company's** opinion for the installation and operation of **The Company's** proposed new Kingsnorth 400kV substation such land to be provided by the **User** pursuant to and in accordance with Clauses 2.19 to 2.22 inclusive
"One Off Works"	the works described in Appendix B1 to this **Construction Agreement**.
"Other User(s)"	other user(s) whose Appendix H Part 1.2 (Shared User) and Appendix H Part 1.3 contains the same **Transmission Reinforcement Works** as in Appendix H Part 1.2 (Shared User) and **Common**

Reinforcement Works to this **Construction Agreement.**

"Secured Amount Statement" — the statement provided by **The Company** to the **User** in accordance with Clause 9.2.2.

"Seven Year Statement Works" — the works set out in Table 6.2 of the statement prepared by **The Company** pursuant to Standard Condition C11 of the **Transmission Licence** and issued by **The Company** in May 200 which in **The Company**'s reasonable opinion are required to be completed before the **Completion Date Stage 1** or **Completion Date Stage 2** as appropriate to ensure that the **GB Transmission System** complies with the requirements of Standard Condition C17 of the **Transmission Licence** and Standard Condition D3 of any **Relevant Transmission Licensee's** transmission licence prior to the **Connection** and operation of the **User's Equipment** in terms of Clause 7 of this **Construction Agreement**.

"Shared User Final Sums" — the amount payable by the **User** on termination of this **Construction Agreement** being the attributable share (such share having regard to any other user whose Appendix H Part 1.2 (Shared User) and Appendix H Part 1.3 contains the same **Transmission Reinforcement Works** as in Appendix H (Stages 1 and 2) Part 1.2 (Shared User) and **Common Reinforcement Works** to this **Construction Agreement**) of the aggregate from time to time and for the time being of:-

(1) 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 **Transmission Reinforcement Works** in Appendix H (Stage 1 and 2) Part 1.2 (Shared User) and **Common**

Reinforcement Works carried out prior to the expiry of the twelve month period to which the **Bi-annual Estimate** current at the time of termination of the **Construction Agreement** refers;

(2) 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 **Transmission Reinforcement Works** in Appendix H (Stage 1 and 2) Part 1.2 (Shared User) and **Common Reinforcement Works** provided it is negotiated on an arms length basis (including any such arising under the **STC**);

(3) fees, expense and costs due in accordance with Clause 2.4.1 in respect of any **Transmission Reinforcement Works** in Appendix H (Stage 1 and 2) Part 1.2 (Shared User) and **Common Reinforcement Works**; and

(4) 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.

"Sole User 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;
	(5) fees, expenses and costs due in accordance with Clause 2.4.1 in respect of the **Construction Works**; and
	(6) interest on any such amounts from the date they were paid by **The Company** to the date of **The Company's** invoice at 2% over **Base Rate** from time to time and for the time being.
	Provided that no sum shall be payable in respect of **Sole User Final Sums** in respect of fees, expenses and costs associated with (a) the **Seven Year Statement Works** and/or (b) **Transmission Reinforcement Works** required for wider system reasons and specified in Appendix H (Stage 1 and 2) Part 2 and\or (c) **Transmission Reinforcement Works** specified in Appendix H (Stage 1 and 2) Part 1.2 (Shared User).
"Term"	the term of this **Construction Agreement** commencing on the date hereof and ending in accordance with Clause 12.
"Third Party Works"	the works 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 (Stage 1) to this **Construction Agreement.**
"Transmission Reinforcement Works"	the **Transmission Reinforcement Works Stage 1** and the **Transmission Reinforcement Works Stage 2**.
"Transmission Reinforcement Works Stage 1"	those works other than the **Transmission Connection Asset Works Stage 1, Seven Year Statement Works** and **One Off Works**, which in the reasonable opinion of **The Company** are necessary to extend or reinforce the **GB Transmission System** in relation to and prior to the connection of the **User's Equipment** at the **Connection Site** and operation at a **Transmission Entry Capacity** of [ ]MW and which are specified in Appendix H (Stage 1) to this **Construction Agreement**, where Part 1.1 and Part 1.2 are works required for the **User** and Part 2 is works required for wider system reasons.
"Transmission Reinforcement Works Stage 2"	those works other than the **Transmission Connection Asset Works Stage 2**, **Seven Year Statement Works** and **One Off Works**, which in the reasonable opinion of **The Company** are necessary to extend or reinforce the **GB Transmission System** in relation to and prior to the operation of the **User's Equipment** at a **Transmission Entry Capacity** of [ ]MW and which are specified in Appendix H (Stage 2) to this **Construction Agreement**, where Part 1.1 and Part 1.2 are works required for the **User** and Part 2 is works required for wider system reasons.
"User's Equipment"	the **Plant** and **Apparatus** owned by a **User** (ascertained in the absence of agreement to the contrary by reference to the rules set out in **CUSC** Paragraph 2.12) which is connected to the **GB**

	Transmission System at this **Connection Site**.
"User's Works"	the **User's Works Stage 1** and the **User's Works Stage 2**.
"User's Works Stage 1"	those works necessary for installation of the **User's Equipment** which are specified in Appendix I (Stage 1) to this **Construction Agreement**.
"User's Works Stage 2"	those works necessary for installation of the **User's Equipment** which are specified in Appendix I (Stage 2) to this **Construction Agreement**.
"Works"	the **Construction Works** and the **User's Works.**

CARRYING OUT OF THE WORKS

Forthwith following the date of this Construction Agreement The Company **and the** User **shall agree the** Safety Rules **and** Local Safety Instructions **to apply during the** Construction Programme **and** Commissioning Programmes**. 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**.**

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 the other all such wayleaves, easements, servitude rights, rights over or interests (but not estates) 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.**

The following additional provisions shall apply in respect of the Consents **and** Construction Works**:-**

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**.**

In the event of:-

the **Consents** not being obtained by the required date; or

the **Consents** being subject to conditions which affect the dates; or

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.

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** and any **Consents** in respect of the **Common Reinforcement Works** excluding any costs associated with the **Seven Year Statement Works** and 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 the

acquisition by it of the freehold of any land. **The Company** shall keep the **User** informed of the level of such charges and expenses being incurred.

2.4.2 Paragraphs 11.2.3 to 11.2.5 of the **CUSC** relating to **Consents** shall apply to the **Construction Agreement** as if set out here in full.

2.5 Prior to the commencement of the **Construction 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**. In the event of the **User** terminating this **Construction Agreement** in terms of this Clause 2.5 the **User** shall be liable to pay to **The Company Final Sums** and on termination shall pay to **The Company** on account of **Final Sums** a) in respect of **Shared User Final Sums** a sum equal to that shown for **Shared User Final Sums** in the **Secured Amount Statement** for the period in which this **Construction Agreement** is terminated and b) in respect of **Sole User Final Sums** a sum equal to **The Company's** estimate or if applicable revised estimate of **Sole User Final Sums** such payments to be made within 14 (fourteen) days of the date of **The Company's** invoice therefor and subject to adjustment in accordance with Clauses 9.6 and 9.7.3. On termination where applicable **The Company** shall disconnect the **User's Equipment** at the **Connection Site** and:

(a) the **User** shall remove any of the **User's Equipment** on **The Company's** land within 6 months of the date of termination or such longer period as may be agreed between **The Company** and the **User**; and

(b) **The Company** shall remove any of the **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** and the **User**.

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** whereupon the **User** shall be liable forthwith on the date this **Construction Agreement** so terminates to pay to **The Company Final Sums** and on termination shall pay to **The Company** on account of **Final Sums** a) in respect of **Shared User Final Sums** a sum equal to that shown for **Shared User Final Sums** in the **Secured Amount Statement** for the period in which this **Construction Agreement** is terminated and b) in respect of **Sole User Final Sums** a sum equal to **The Company's** estimate or if applicable revised estimate of **Sole User Final Sums** such payments to be made within 14 days of the date of **The Company's** invoice therefor and subject to adjustment in accordance with Clauses 9.6 and 9.7.3. On termination **The Company** shall where applicable disconnect the **User's Equipment** at the **Connection Site** and:

(a) the **User** shall remove any of the **User's Equipment** on **The Company's** land within 6 months of the date of termination or such longer period as may be agreed between **The Company** and the **User**; and

(b) **The Company** shall remove any of the **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** and the **User**.

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 Programmes** 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, in the case of **The Company**, provide such information as the **User** shall reasonably require in respect of the **Common Reinforcement Works** and shall each 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 Programmes The Company** shall allow the **User**, its employees, agents, suppliers, contractors and sub-contractors necessary access to its site and the **User** shall allow **The Company** their employees, agents, suppliers, contractors and sub-contractors necessary access to its site to enable each to carry out the **Transmission Connection Asset Works** and **One Off Works** or **User's Works** but not so as to disrupt or delay the construction and completion of the other's **Works** on the said sites or the operation of the other's **Plant** and **Apparatus** located thereon, such access to be in accordance with any reasonable regulations relating thereto made by the site owner or occupier.

2.10 Not later than six months prior to the **Commissioning Programme Commencement Date** relevant for a stage or such other time as the parties shall agree **The Company** shall provide the **User** with a draft of the **Commissioning Programme** for the relevant stage for the **Commissioning** of the **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 **Completion Date Stage 2** 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** and/or **Common Reinforcement 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 **Common 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 Where **The Company** notifies the **User** to this effect, the **Transmission Reinforcement Works** are conditional on British Energy Generation Limited and/or Magnox Electric plc (as the case may be) granting approval to the carrying out of the **Construction Works** in terms of their **Nuclear Site Licence Provisions Agreement.** 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** and the **Construction Programme** and make any consequential changes to the **Bilateral Connection Agreement**.

2.13 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 **Common Reinforcement Works** and each of the **User** and **The Company** shall accordingly discharge all the duties of clients under the said **Regulations**.

2.14 Not later than 6 months prior to the **Completion Date Stage 1** or such other period as the parties shall agree **The Company** and the **User** shall enter into the **Interface Agreement** to reflect the **Works**.

2.15 For the avoidance of doubt **The Company** shall have no obligations to the **User** in respect of the undertaking of or completion of the **Common Reinforcement Works** but to the extent that such works are undertaken prior to the **Completion Date Stage 2 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 **Completion Date Stage 2**

2.16 It is a condition of this **Construction Agreement** that the **Connection Site** is not a nominated site under the "NAECI" (The National Agreement for the Engineering Construction Industry) conditions and will not become one and any agreement for this site will be conditional upon this. In the event that this condition should not be met, **The Company** shall be entitled to review all the dates in this **Construction Agreement** and charges contained in the **Bilateral Connection Agreement.**

DELAYS

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.**

If prior to the Completion Date Stage 1 **and/or** Completion Date Stage 2 **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 relevant** Commissioning Programme Commencement Date **and/or (as the case may be) the** Completion Date Stage 1 **and/or** Completion Date Stage 2 **as appropriate 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 Programmes **shall be deemed automatically amended as appropriate.**

COMMISSIONING PROGRAMME AND LIQUIDATED DAMAGES

Each party shall give written notice to the other declaring its readiness to commence the Commissioning Programme **for the relevant stage when this is the case.**

The Commissioning Programme **for the relevant stage shall commence forthwith once both parties have given written notice to the other under Clause 4.1.**

The Works **shall be deemed to have been** Commissioned **on the date that the** Independent Engineer **certifies in writing to that effect.**

In the event that the actual date on which the Construction Works **are** Commissioned **is later than the** Completion Date Stage 1 **or** Completion Date Stage 2 **as appropriate** The Company **(if and to the extent that it is responsible for delayed completion beyond such** Completion Date Stage 1 **or** Completion Date Stage 2 **(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 Stage 1 **or** Completion Date Stage 2. **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**.**

Liquidated Damages **payable under Clause 4.4 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.**

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 relevant** Commissioning Programme Commencement Date **and/or the relevant** Completion Date.

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 **for Stage 2 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 **for the Stage 2,** The Company **shall have the right to terminate this**

Construction Agreement **in full or in part upon giving notice in writing to the** User**. In the event of such termination the** User **shall in addition to the amounts for which it is liable under Clause 2.4 to this** Construction Agreement **be liable to** The Company **to pay to** The Company Final Sums **and on termination shall pay to** The Company **on account of** Final Sums **a) in respect of** Shared User Final Sums **a sum equal to that shown in the** Secured Amount Statement **for** Shared User Final Sums **for the period in which this** Construction Agreement **is terminated and b) in respect of** Sole User Final Sums **a sum equal to** The Company's **estimate or if applicable revised estimate of** Sole User Final Sums **such payments to be made within 14 (fourteen) days of the date of** The Company**'s invoice therefor and subject to adjustment in accordance with Clauses 9.6 and 9.7.3. On termination, where applicable,** The Company **shall disconnect the** User's Equipment **at the** Connection Site **and:**

(a) **the** User **shall remove any of the** User's Equipment **on land within 6 months of the date of termination or such longer period as may be agreed between** The Company **and the** User; **and**

(b) The Company **shall remove 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 **and the** User**.**

APPROVAL TO CONNECT/ENERGISE/BECOME OPERATIONAL

Not later than 4 months prior to the expected Commissioning Programme Commencement Date **for a stage 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.**

Not later than 3 months prior to the expected Commissioning Programme Commencement Date **for a stage 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.**

Not later than 3 months prior to the expected Commissioning Programme Commencement Date **for a stage or by such other time as may be agreed between the parties:-**

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**

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**.**

Not later than 8 weeks prior to the expected Commissioning Programme Commencement Date **for a stage or by such other time as may be agreed between the parties each party shall submit to the other:**

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;**

written confirmation as required under CC.5.2(g) that the list of Safety Co-ordinators **are authorised and competent;**

a list of the telephone numbers for the facsimile machines referred to in CC6.5.9.

Not later than 3 months prior to the expected Commissioning Programme Commencement Date **for a stage or such other time as may be agreed between the parties 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.**

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 **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** for stage 1 and thereafter upon compliance by the **User** with the provisions of Clause 5 and provided (1) the **Construction Works Stage 1** excluding the **Seven Year Statement Works** shall be **Commissioned** and (2) the relevant **Seven Year Statement Works** and **Third Party Works** shall be completed and (3) The **Interface Agreements** have been completed **The Company** shall forthwith notify the **User** in writing that the **Connection Site** shall become **Operational** at a **Transmission Entry Capacity** of [ ]MW.

7.2 **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** for stage 2 and thereafter upon compliance by the **User** with the provisions of Clause 5 and provided (1) the **Construction Works Stage 2** excluding the **Seven Year Statement Works** shall be **Commissioned** and (2) the relevant **Seven Year Statement Works** and **Third Party Works** shall be completed **The Company** shall forthwith notify the **User** in writing that the **Connection Site** shall become **Operational** at a **Transmission Entry Capacity** of [ ]MW.

8. COMPLIANCE WITH SITE SPECIFIC TECHNICAL CONDITIONS

The **User** shall ensure that on the **Completion Date Stage 1** the **User's Equipment** complies and on the **Completion Date Stage 2** continues to comply with the site specific technical conditions set out in Appendix F 1-5 to the **Bilateral Connection Agreement**.

9. PROVISION OF SECURITY

9.1 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 9.8) 28 days after the **Completion Date Stage 2** (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 9.2 of this **Construction Agreement** as requiring to be secured.

9.2 Provision of **Bi-annual Estimate** and **Secured Amount Statement**

9.2.1 **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** (based on a 12 month liability in respect of the **Shared User Final Sums** and a 6 month liability in respect of the **Sole User 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.

9.2.2 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 (in respect of a 12

month liability in respect of **Shared User Final Sums** and a 6 month liability in respect of **Sole User Final Sums**).

9.2.3 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 9.2.1 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 9.2.3 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.**

9.3 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** within 14 days of the date of **The Company's** invoice (s) therefor.

9.4 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:-

9.4.1 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

9.4.2 the fairness and reasonableness of **The Company's** estimate; or

9.4.3 whether there has been an **Event of Default** (under the **Construction Agreement** or the **CUSC**), or

9.4.4 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 9.1 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.

9.5 If there shall be any dispute as mentioned in Clause 9.4 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 9.4.1 and 9.4.2 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 9.5 shall survive termination) and, in the case of Clauses 9.4.3 and 9.4.4 be dealt with by referral to arbitration in accordance with the **Dispute Resolution Procedure**.

Final Sums

9.6 Within 60 days (in the case of **Sole User Final Sums**) and (in the case of **Shared User Final Sums**) as soon as reasonably practicable and once **The Company** has had sufficient opportunity to assess the consequences of such termination on any **Transmission Reinforcement Works** in Appendix H Part 1.2 (Shared User) and **Common Reinforcement Works** 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.

9.7.1 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.

9.7.2 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.

9.7.3 As soon as reasonably practicable after termination of this **Construction Agreement** and (in the case of **Shared User Final Sums** once **The Company** has had sufficient opportunity to assess the consequences of such termination on any **Transmission Reinforcement Works** in Appendix H Part 1.2 (Shared User) and **Common Reinforcement Works**, **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 **Secured Amount Statement** and **The Company's** estimate(s) of **Final Sums** the **User** shall within 28 days of the said final 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) of sums equal to the **Secured Amount Statement** and **The Company's** estimate of **Final Sums** to the date of the final statement of and invoice for **Final Sums**.

If the **Final Sums** is less than the payments made by the **User** in respect of the **Secured Amount Statement** and **The Company's** estimate of **Final Sums** 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 sums equal to the **Secured Amount Statement** and **The Company's** estimate(s) of **Final Sums** to the date of reimbursement by **The Company** of the said excess paid.

9.8 The obligations to provide security under this Clause 9 shall continue until either all sums due under this **Construction Agreement** have been paid in full or until the **Completion Date Stage 2** provided 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**.

9.9 The parties recognise that the **Secured Amount Statement** is based on the assumption that all **Other Users** likewise terminate their construction agreements within that 6 month period and that as a result those **Transmission Reinforcement Works** and **Common Reinforcement Works** do not proceed and are not capable of

reuse and that the liability to pay the total sums due in respect of these are shared between the **User** and such **Other Users**.

9.10 **The Company** shall notify the **User** a) as soon as practicable in the event that an **Other User** terminates its **Construction Agreement** or b) where **The Company** subsequently enters into a construction agreement with an **Other User** at the same time as the issue by **The Company** of the **Final Sums Estimate** next following this.

9.11 As soon as practicable after the termination of a construction agreement or acceptance of an **Offer** by an **Other User The Company** shall undertake a review of the **Construction Works** and **Common Reinforcement Works** and the extent to which such works remain the most economic and efficient design in such circumstances and whether they should remain in and are still required for the **User** and appropriate to be included in the **Construction Works** and **Common Reinforcement Works** and shall notify the **User** accordingly.

10. EVENT OF DEFAULT

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

10.1 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 10 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 10.1 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 10.1 subsequently occurring.

10.2 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 9.1 or 10.1 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.**

10.3 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.

10.4 If any party who may at any time be providing or holding security in favour of **The Company** pursuant to Clauses 9.1 or 10.1 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.

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

11. TERMINATION ON EVENT OF DEFAULT

11.1 Once an **Event of Default** pursuant to Clause 10 has occurred and is continuing **The Company** may give notice of termination to the **User** whereupon this **Construction Agreement** shall forthwith terminate and **The 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 **The Company's** land within 6 months of the date of termination or such longer period as may be agreed between **The Company** and the **User**; and

(b) The Company **shall remove 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 **and the** User**.**

11.2 The **User** shall (notwithstanding any longer time for payment which but for such termination the **User** may have for payment pursuant to this **Construction Agreement**) within 14 days from the date of termination pay to **The Company** all amounts already due and owing on the date this **Construction Agreement** so terminates and if this **Construction Agreement** terminates prior to the **Completion Date Stage 2** the **User** shall be liable forthwith on the date this **Construction Agreement** so terminates to pay to **The Company Final Sums** and on termination shall pay to **The Company** on account of **Final Sums** a) in respect of **Shared User Final Sums** a sum equal to that shown in the **Secured Amount Statement** for **Shared User Final Sums** for the period in which this **Construction Agreement** is terminated and b) in respect of **Sole User Final Sums** a sum equal to **The**

Company's estimate or if applicable revised estimate of **Sole User Final Sums** such payments to be made within 14 days of the date of **The Company's** invoice in respect thereof and subject to adjustment in accordance with Clauses 9.6 and 9.7.3.

11.3 Once an **Event of Default** occurs and until such time as it is remedied **The Company** shall be entitled to suspend the carrying out of the **Construction Works** and if this **Construction Agreement** is not terminated **The Company** shall be entitled to amend the **Construction Agreement** and as a consequence the **Bilateral Connection Agreement** as necessary to reflect the consequences of such suspension.

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, 4.5 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 **Completion Date Stage 2** the **User** be liable to pay to **The Company Final Sums** and on such termination shall pay to **The Company** on account of **Final Sums** a) in respect of **Shared User Final Sums** a sum equal to that shown in the **Secured Amount Statement** for **Shared User Final Sums** for the period in which this **Construction Agreement** is terminated and b) in respect of **Sole User Final Sums** a sum equal to **The Company's** estimate or if applicable revised estimate of **Sole User Final Sums** such payments to be made within 14 days of the date of **The Company's** invoice therefore and subject to adjustment in accordance with Clauses 9.6 and 9.7.3 and 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 Stage 2**.

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), 6.24 (Counterparts), 6.20 (Waiver), 6.21 (Notices), 6.22 (Third party Rights), 6.23 (Jurisdiction), 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 this **Construction Agreement** and the Appendices in accordance with Clauses 2.3, 2.11 and 11.3 and Paragraph 6.9 of the **CUSC**.

16. CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999

The parties hereto hereby acknowledge and agree for the purposes of the Contracts (Rights of Third Parties) Act 1999 that no rights, powers or benefits are or shall be conferred on any person pursuant to this Agreement except for such rights, powers or benefits as are expressly conferred on the parties hereto in accordance with, and subject to, its terms.

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

SIGNED BY)

)

for and on behalf of)
NATIONAL GRID ELECTRICITY TRANSMISSION plc)

SIGNED BY)

)

for and on behalf of)
[ ])

DATED 2006

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

and

(2)

TRANSMISSION RELATED AGREEMENT REGARDING BID PRICE/OFFER PRICE HEDGE FOLLOWING FAILURE TO COMPLY WITH RESTRICTIONS ON AVAILABILITY

THIS **TRANSMISSION RELATED AGREEMENT** is made on the day of 200

BETWEEN

(1) **NATIONAL GRID ELECTRICITY TRANSMISSION PLC** a company registered in England and Wales with company 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 Northern Ireland with number [ ] whose registered office is at [ ] ("**User**", which expression shall include its successors and/or permitted assigns).

WHEREAS

(A) **The Company** and the **User** are parties to the **CUSC Framework Agreement** which gives effect to the document designated by the **Secretary of State** and adopted by **The Company** as the Connection and Use of System Code pursuant to the **Transmission Licence**, as from time to time modified pursuant to the **Transmission Licence** (the "**CUSC**").

(B) **The Company** and the **User** are parties to a **Bilateral Connection Agreement** dated [ ] (ref: [ ]) in respect of the connection to and use of the **GB Transmission System** at [ ] (the **"Bilateral Connection Agreement**").

(D) Under the terms of the **Bilateral Connection Agreement** restrictions on availability apply during the **Interim TEC Period** and as a result the **User** is required to enter into this **Transmission Related Agreement** on the terms and subject to the conditions set out below.

NOW IT IS HEREBY AGREED as follows:

1. DEFINITIONS, INTERPRETATION AND CONSTRUCTION

1.1 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,** the **Construction Agreement**, the **Balancing and Settlement Code** and the **Grid Code** have the same meanings, interpretations or constructions in this **Transmission Related Agreement**.

1.2 "**Base Rate** " shall be defined in respect of any day as the rate per annum which is equal to the base lending rate from time to time of Barclays Bank plc as at the close of business on the immediately preceding week-day other than a Saturday on which banks are open in the City of London (the "**Business Day**").

1.3 "**Enhanced Rate**" shall be defined in respect of any day as the rate per annum which is 4 % per annum above the base lending rate from time to time of Barclays Bank plc at the close of business immediately preceding the **Business Day**.

1.4 "**Party**" shall be defined as each party to this **Transmission Related Agreement** and any successor(s) in title to, or permitted assign(s) of such person.

1.5 References in this **Transmission Related Agreement** to "this **Transmission Related Agreement**" include references to the Schedule hereto.

2. COMMENCEMENT AND TERM

2.1 This **Transmission Related Agreement** shall come into effect on the date hereof and shall continue in force and effect until the earlier of a) the end of the **Interim TEC Period** or b) the **User's Equipment** is **Disconnected** from the **GB Transmission System** at the **Connection Site** in accordance with **CUSC**.

2.2 Any provisions for payment shall survive termination of this **Transmission Related Agreement**.

3. PAYMENTS BY THE USER

3.1 Where in accordance with clause 11 of the **Bilateral Connection Agreement** the provisions of this **Transmission Related Agreement** are expressed to apply then the **User** shall make a payment to **The Company** determined in accordance with Clause 3.2 hereof.

3.2 The payment by the **User** referred to in Clause 3.1 above shall be an amount calculated on a **Settlement Period** basis and for each relevant **BM Unit** and shall be determined in accordance with the provisions set out below:-

Where:-

(a) in respect of a **BM Unit**, the prevailing **Maximum Export Limit** is other than that permitted under Clause 11 of the **Bilateral Connection Agreement**; and

(b) **The Company** issues in accordance with the **Grid Code** a **Bid-Offer Acceptance** requiring the **BM Unit** to reduce the absolute value of **Output** to the figure required under Clause 11 of the Bilateral Connection Agreement,

then the following formula shall apply:-

$$PNGC_i = \sum_{j \in J} \sum^{n} \left(\min\left(0, PB_{ij}^{n}\right) \times QAB_{ij}^{n} + \max\left(0, PO_{ij}^{n}\right) \times QAO_{ij}^{n} \right)$$

Where:-

PNGC represents the payment from the **User** to **The Company** in respect of **BM Unit** i

$\sum^{n}$ represents the sum over all **Bid-Offer Pair Numbers** for the **BM Unit**

$\sum_{j \in J}$ represents the summation over all **Settlement Periods** j in the set of **Settlement Periods** *J* being those **Settlement Periods** in respect of which both the events specified in (a) and (b) above occurred

And :

PB^{n}_{ij} = **Bid Price** *n* for **BM Unit** i in **Settlement Period** j

QAB^{n}_{ij} = **Period BM Unit Total Accepted Bid Volume**

PO^{n}_{ij} = **Offer Price** *n* for **BM Unit** i in **Settlement Period** j

QAO^{n}_{ij} = **Period BM Unit Total Accepted Offer Volume**

n = **Bid–Offer Pair Number**

i = **BM Unit**

j = **Settlement Period**

3.3 The payment by the **User** referred to in Clause 3.1 above shall be made in accordance with the Schedule to this **Transmission Related Agreement.**

4. VARIATIONS

4.1 Subject to Clause 4.2, no variation to this **Transmission Related Agreement** shall be effective unless made in writing and signed by or on behalf of both **The Company** and the **User**.

4.2 **The Company** and the **User** shall effect any amendment required to be made to this **Transmission Related 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.

5. GENERAL PROVISIONS

The following provisions of the **CUSC** shall apply to this **Transmission Related Agreement** *mutatis mutandis* as if set out in full herein:-

Paragraphs 6.12 (Liability), 6.14 (Transfer and Sub-contracting), 6.15 (Confidentiality), 6.16 (Data), 6.18 (Intellectual Property), 6.19 (Force Majeure), 6.20 (Waiver), 6.21 (Notices), 6.22 (Third Party Rights), 6.23 (Jurisdiction), 6.25 (Governing Law), 6.26 (Severance of Terms), 6.27 (Language), 7.4 (Disputes) and 7.5 (Third Party Claims).

6. COUNTERPARTS

This **Transmission Related Agreement** may be entered into in any number of counterparts and by different parties in separate counterparts, each of which when signed shall constitute an original but all the counterparts shall together constitute but one and the same agreement.

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

SIGNED BY)
)
for and on behalf of)
NATIONAL GRID ELECTRICITY TRANSMISSION PLC)

SIGNED BY)
)
for and on behalf of)
)

SCHEDULE OF PAYMENT PRINCIPLES

1.1 On the fifth **Business Day** of each calendar month **The Company** shall where applicable send to the **User** a statement ("the **Provisional Monthly Statement**") consisting of:-

(a) a statement (the "**Provisional Statement**") containing details of the payment calculation(s) made pursuant to Clause 3.2 of this **Transmission Related Agreement** in respect of the previous month; and,

(b) if relevant, a statement showing adjustments to be made (net of interest) in relation to any dispute regarding the payment calculation(s) in respect of any month prior to the previous month ("the **Provisional Adjustments Statement**"),

in each case showing the payments due to or from the **User** as a result thereof and the net amount due to or from the **User**.

1.2 If the **User** disagrees with any of the dates, times, facts or calculations as set out in the **Provisional Statement** and/or the **Provisional Adjustments Statement**, it shall produce to **The Company** the evidence which it relies upon in support of such disagreement. The **Parties** shall discuss and endeavour to resolve the matter but if it cannot be resolved the Parties may have recourse to an arbitrator appointed pursuant to paragraph 7.4 of the **CUSC**. Where a dispute is resolved, **The Company** shall adjust the account between itself and the User accordingly in the **Final Statement** where practicable or otherwise in the next **Provisional Adjustments Statement** which it issues.

1.3 Thirteen **Business Days** after the date specified in paragraph 1.1 **The Company** shall send to the **User** a statement ("the **Final Monthly Statement**") consisting of:-

(a) a statement ("the **Final Statement**") incorporating:-

(i) in the case of an undisputed **Provisional Statement** (or where any dispute has been resolved and no changes have been effected to the calculations contained in the **Provisional Statement**) the calculation made under paragraph 1.1.(a) together with an invoice for the amount shown as being due to or from the **User** (as the case may be) ; or

(ii) in the case of a disputed **Provisional Statement** where the dispute has been resolved prior to the issue of the **Final Statement** and changes to the calculations contained in the **Provisional Statement** have been agreed, a revised calculation made under paragraph 1.1(a) together with an invoice for the amount shown as being due to or from the **User** (as the case may be) ; and

(b) if a **Provisional Adjustments Statement** has been issued in accordance with paragraph 1.1(b), a statement ("the **Final Adjustments Statement**") showing adjustments to be made in relation to any dispute concerning any month prior to the previous month together with interest thereon up to and including the date of payment referred to in paragraph 1.5 such adjustments will be reflected in the invoice referred to at paragraph 1.3 (a).

1.4 Where either **Party** discovers that any previous **Provisional Monthly Statement** or **Final Monthly Statement** contains an arithmetic error or omission **The Company** shall adjust the account between itself and the **User** accordingly in the next **Provisiona**l **Adjustments Statement** which it issues, setting out the reason why the adjustment has been made and the provisions of paragraph 1.2 shall apply *mutatis mutandis* to such adjustments.

1.5 The due date of payment in respect of any disputed amount subsequently determined or agreed to be payable shall be the date for payment of the relevant **Provisional Statement** from which the dispute arises. The successful **Party** to the dispute shall be entitled to interest at the **Base Rate** on any disputed amount until the date of payment.

1.6 Each **Party** shall pay to the other the net amount shown as due from that **Party** in the **Final Monthly Statement** within three **Business Days** of the date on which such statement is issued.

1.7 If either **Party** ("the **Defaulting Party**"), in good faith fails to pay under paragraph 1.6 any amount properly due under this **Transmission Related Agreement**, then such **Defaulting Party** shall pay to the other **Party** interest on such overdue amount from and including the due date of such payment to (but excluding) the date of actual payment at the **Base Rate**. Provided that should the **Defaulting Party** otherwise fail to pay any amount properly due under this **Transmission Related Agreement** on the due date then the **Defaulting Party** shall pay to the other **Party** interest on such overdue amount at the **Enhanced Rate** from the due date on

which such payment was properly due to (but excluding) the date of actual payment. Any interest shall accrue from day to day.

1.8 If following a dispute or by virtue of paragraphs 1.2 or 1.4 it is determined or agreed that a **Party** was entitled to a further payment from the other **Party**, that **Party** shall be entitled to interest at the **Base Rate** on the amount of such further payment from the due date calculated in accordance with paragraph 1.5 until the date of payment.

1.9 If following a dispute or by virtue of the provisions of paragraphs 1.2 or 1.4 it is determined or agreed that a **Party** was not entitled to any payment it has received, the other **Party** shall be entitled to interest at the **Base Rate** on the amount so paid from the date of payment until the date of repayment or the date when the first **Party** makes a payment to the other **Party** which takes such payment into account.

1.10 Notwithstanding the terms thereof, **The Company** shall be entitled to set off against any amount falling due and payable by **The Company** to the **User** under any **Balancing Services Agreement** from time to time in force, all or a part of any payment or payments falling due and payable by the **User** to **The Company** under this **Transmission Related Agreement**.

1.11 All amounts specified hereunder shall be exclusive of any Value Added Tax or other similar tax and **The Company** or the **User** as the case may be shall pay the Value Added Tax at the rate for the time being and from time to time properly chargeable in respect of all payments made under this **Transmission Related Agreement.**

1.12 Save where otherwise stated, references in this Schedule to paragraphs are references to paragraphs of this Schedule.

ANNEX 3 – WORKING GROUP TERMS OF REFERENCE AND MEMBERSHIP

RESPONSIBILITIES

1. The Working Group is responsible for assisting the CUSC Amendments Panel in the evaluation of CUSC Amendment Proposal CAP143 tabled by SSE Generation Ltd at the Amendments Panel meeting on 15 December 2006.

2. The proposal must be evaluated to consider whether it 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 Proposal and consider if the proposal 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 constraints
   - Impact on TO construction programmes
   - Definitions
   - Process

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 Proposal, 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 Proposal or any Working Group

Alternative Amendment arising from the Working Group's discussions should be clearly described in the final Working Group Report to the CUSC Amendments Panel.

8. The Working Group is to submit their final report to the CUSC Panel Secretary on [Date] for circulation to Panel Members. The conclusions will be presented to the CUSC Panel meeting on [Date].

MEMBERSHIP

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

Chair	Hedd Roberts
National Grid	Adam Brown
Industry Representatives	James Anderson
	Thomas Chappell
	Mike Davies
	Richard Ford
	Dennis Gowland
	Garth Graham
	Paul Jones
	Robert Longden
	Simon Lord
	Keith MacLean
	John Morris
	Alec Morrison
	Bill Reed
	Malcolm Taylor
	Dave Wilkerson
Authority Representative	Mark Copley
Technical Secretary	Beverley Viney

[NB: Working Group must comprise at least 5 Members]

10. The membership can be amended from time to time by the CUSC Amendments Panel or the Working Group Chairman.

RELATIONSHIP WITH AMENDMENTS PANEL

11. The Working Group shall seek the views of the Amendments Panel before taking on any significant amount of work. In this event the Working Group Chairman should contact the CUSC Panel Secretary.

12. Where the Working Group requires instruction, clarification or guidance from the Amendments Panel, particularly in relation to their Scope of Work, the Working Group Chairman should contact the CUSC Panel Secretary.

MEETINGS

13. 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.

REPORTING

14. The Working Group Chairman shall prepare a final report to the 30 March 2007 Amendments Panel responding to the matter set out in the Terms of Reference.

15. A draft Working Group Report must be circulated to Working Group members with not less than five business days given for comments.

16. Any unresolved comments within the Working Group must be reflected in the final Working Group Report.

17. The Chairman (or another member nominated by him) will present the Working Group report to the Amendments Panel as required.

ANNEX 4 – INTERNAL WORKING GROUP PROCEDURE

1. Very summary meeting notes of agreements reached or issues raised for further assessment, together with actions from each meeting will be produced by the Technical Secretary (provided by National Grid) and circulated to the Chairman and Working Group members for review.

2. The notes and actions will be published on the National Grid CUSC Website after they have been agreed at the next meeting or sooner on agreement by Working Group members.

2. The Chairman of the Working Group will provide an update of progress and issues to the Amendments Panel each month as appropriate.

4. Working Group meetings will be arranged for a date acceptable to the majority of members and will be held as often as required as agreed by the Working Group in order to respond to the requirements of the Terms of Reference set by the Amendments Panel.

5. If within half an hour after the time for which the Working Group meeting has been convened the Chairman of the group is not in attendance, the meeting will take place with those present.

6. A meeting of the Working Group shall not be invalidated by any member(s) of the group not being present at the meeting.

ANNEX 5 – AMENDMENT PROPOSAL FORM

CUSC Amendment Proposal Form	**CAP:143**

Title of Amendment Proposal:

Interim Transmission Entry Capacity ("ITEC") product

Description of the Proposed Amendment ***(mandatory by proposer)*:**

This Amendment Proposal adds a new section to the CUSC defining the principles of and process for obtaining Interim TEC ("ITEC").

Interim TEC can be described as follows.

1. What Users can apply for Interim TEC?

   Only a User with an existing Bilateral Connection Agreement or Bilateral Embedded Generation Agreement which, in either case, is subject to the carrying out of Transmission Reinforcement Works will be entitled to apply for Interim TEC.

2. When can Interim TEC be applied for and for how long does it remain in place?

   A User can apply for Interim TEC immediately on the later to occur of:

   (i) the relevant party or parties obtaining statutory consents (i.e. consent under the Town and Country Planning Acts and/or any consent needed under ss.36 and 37 of the Electricity Act 1989) necessary for the Transmission Reinforcement Works relevant to the User; and

   (ii) the User obtaining statutory consents (i.e. consent under the Town and Country Planning Acts and/or any consent needed under ss.36 and 37 of the Electricity Act 1989) necessary for the User's Works.

   Once ITEC is authorised, it will apply until TEC is available in accordance with the relevant Bilateral Agreement (including the relevant Bilateral Construction Agreement).

3. What rights and restrictions apply to Interim TEC?

   Interim TEC is a right to use the GB Transmission System up to the Interim Transmission Entry Capacity on the following basis:-

   (i) ITEC is any amount up to the TEC stated in the existing bilateral agreement;
   (ii) NGET is entitled to interrupt the User for all or part of their generation output for up to X hours per year without incurring any liability to pay an interruption payment. A fixed value for X hours will be inserted in the CUSC. **[The value for 'X' would be derived during assessment by consideration of typical restrictions on access arising from issues such as line outages and faults and any other differences between TEC and ITEC. A possible starting point for discussions is 100 hours.]**

4. How will NGET grant ITEC to users?

   Provided that a request for ITEC is made by a User meeting the conditions in 1 and 2 above, NGET will grant that request. A process can be added to the CUSC similar to that developed for STEC and LDTEC to facilitate the granting of ITEC. Appendix C of each bilateral agreement can be amended to reflect the ITEC terms agreed until it is superseded by the availability of TEC.

Description of Issue or Defect that Proposed Amendment seeks to Address ***(mandatory by proposer)*****:**

The CUSC currently provides for access products as follows:-

- **Transmission Entry Capacity provides the User with the right to generate electricity up to the level of TEC at any time during the year and on an enduring, "evergreen" basis;**
- **Short Term TEC ("STTEC") provides a user with access for a period of a limited number of days depending on the type of STTEC purchased at a premium price relative to TEC if used throughout the year; and**
- **Limited Duration TEC ("LDTEC") again provides limited term access to TEC on a firm or indicative profile basis until the end of the relevant year.**

The nature of the existing TEC products available under the CUSC combined with a number of other factors including the "invest and connect" methodology which underpins the CUSC and the related charging regime have led to prospective Users receiving connection dates well into the future.

The problem is particularly acute where the Transmission Companies need to carry out significant network investment projects in order to enable particular projects to connect with firm TEC rights.

The proposer believes that the current suite of access products are unnecessarily restrictive for some new connectees and that there is scope for an interim TEC access product that has less commercial firmness than the current 'TEC suite'. Creation of such a product will thereby bring forward access to the market for new connectees who can tolerate less firm access in the first instance. This product is intentionally limited in duration to the start of availability of TEC and should not be seen as an alternative, rather as an adjunct.

The proposer believes an appropriate limit on the cumulative no-compensation restriction to access can be determined and that this will provide a balance between NGET's requirements and a level of risk to the new connectee's access that is commercially tolerable to new connectees.

Such a product will bring forward access to the network and hence enhance competition in generation.

It will also enhance utilisation of the network and hence NGET's licence obligations with regard to efficient provision of an optimised network.

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

The proposal suggests introducing a new section (probably as Section 6.33) entitled Interim TEC.

This section will set out the matters dealt with in the above description of Interim TEC.

In addition, changes are likely to be required in the following areas:

Add references to ITEC in Sections 2.3.1, 2.3.2 (Export of Power from Connection Site), 3.2.3, 3.2.4 (Transmission Entry Capacity), 3.9.2 (Use of System Charges), 4.1.3.7A (Frequency response), 6.6.1 and 6.6.2 (Payment).

Add new definitions as required.

CUSC Section 5.10 and related definitions - Relevant Interruptions.

CUSC Schedule 2 Exhibits 1 and 2.

Develop appropriate ITEC request form.

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

Application of this product may need to be assessed alongside the current working of the GB Security and Quality Supply Standard

Although not a core industry document NGET's Statement of Use of System Charging Methodology and Statement of Use of System Charges may be impacted.

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

To be assessed.

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

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

The purpose of this proposal is to encourage access to the GB transmission system by creating a new product offering restricted access to the GB transmission system.

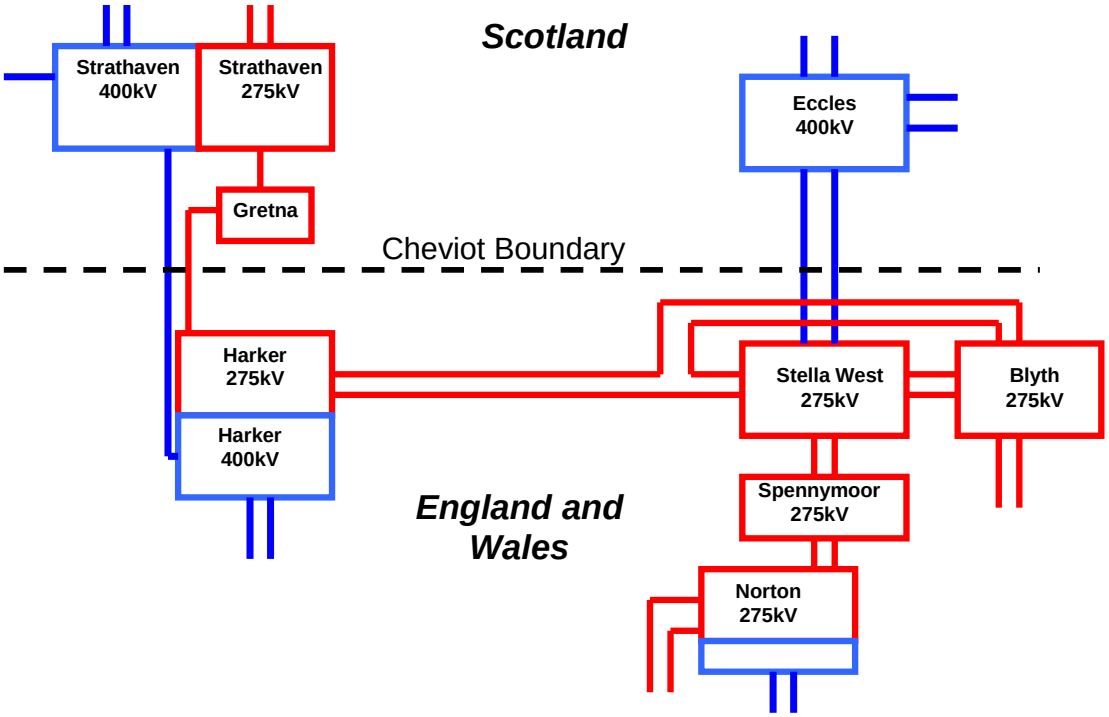
This proposal will facilitate the CUSC Objectives (listed in Section C10, paragraph 1) of both the efficient use of the transmission system and effective competition in generation. In particular, the proposal should have the impacts noted in the "Description of Issue" section above.

ANNEX 6 – PRESENTATIONS MADE BY NATIONAL GRID

Annex 6a: The determination and application of X – theoretical view

National Grid presented an initial view of identifying, in a limited case, the impact that the allocation of Interim TEC (ITEC) could have on transmission constraints, illustrating an indicative number of hours that ITEC would need to be withdrawn to attempt to avoid these constraints. The allocation of ITEC north of the Cheviot boundary, illustrated in Figure 1, has been considered.

Figure 1. Boundary considered



Methodology used

A probabilistic model was used, which combines distributions of Scottish generation (excluding ITEC) and Scottish demand. From this information, the distribution of flows over the boundary can be established and limits to the export capability of the boundary observed.

The relevant volume of ITEC is then added to the generation background, from which the increase in constraint volume can be observed. The model is forward-looking as it is foreseeable that Users of ITEC may utilise this right for several years.

Assumptions

Demand

Peak Scottish demand based on information in the GB SYS is used with some growth assumed during the period examined, whilst the common historic load duration curve is scaled to annual peak.

Generation
Generation data was assumed to follow investment planning assumptions, with output profiles of individual units reflecting historic trends.

Use of ITEC
Considering projects dependent on Beauly-Denny alone, National Grid identified that 4 projects with a combined capacity of ~500MW might be interested in applying for ITEC. In view of this, National Grid considered the following three scenarios when conducting the analysis:

- 500MW north of Cheviot boundary use of ITEC from transmission consent date;
- 500MW north of Cheviot boundary use of ITEC from transmission consent date + 24 months; and
- 100MW north of Cheviot boundary use of ITEC from transmission consent date.

Cheviot boundary
When undertaking the analysis, the following boundary transfer capabilities were used:

- Winter intact: 2.1GW
- Summer intact: 1.9GW
- Summer outage: 1.4GW

Outages required to facilitate the construction of additional transfer capability were assumed to be 12 weeks for summer 2007 rising in future years, to 20 weeks.

Factors not considered
National Grid noted that all numbers presented from the analysis should be considered as illustrative values only, under a set of fixed conditions with the ability for National Grid to accurately predict periods of constraint with perfect foresight. In practice, other factors would need to be considered which would only serve to increase the value of X, such as:

- unforeseen operational circumstances e.g. unplanned outages;
- multiple constraint boundaries; and
- "local" issues, including boundaries and generation behaviour.

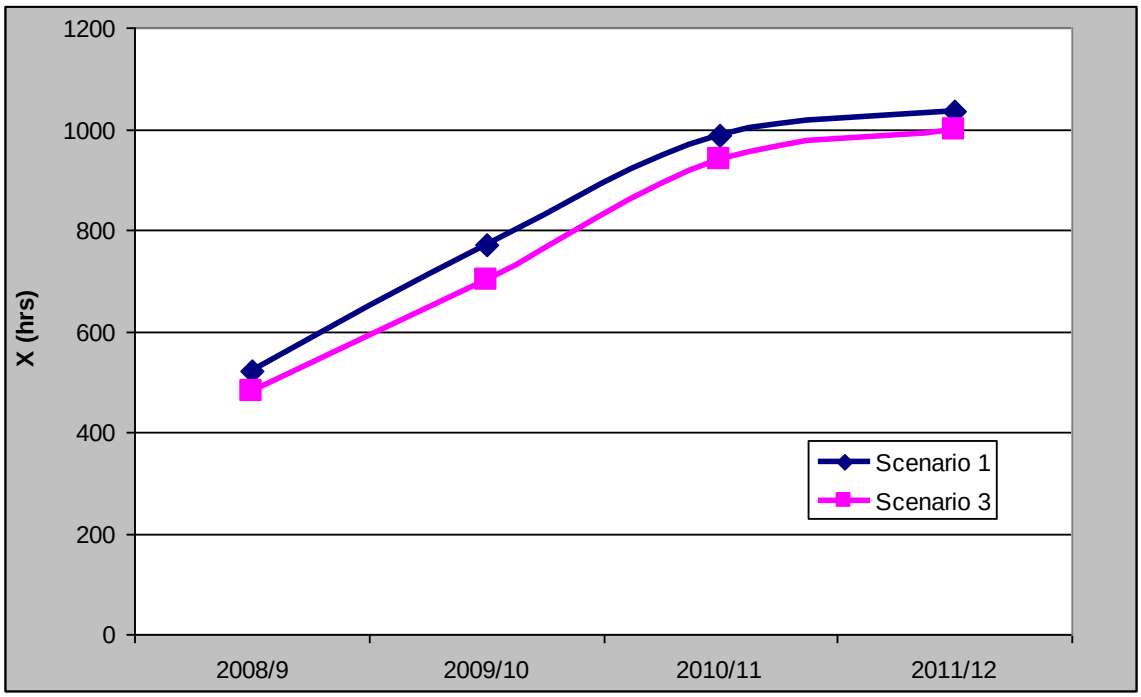
Deriving the value of X
The model used to undertake the analysis provides the probability of a given volume of constraints occurring given a range of conditions. National Grid noted that a wide range of possible outcomes could therefore be derived with the range of probabilities of considering all eventualities. The numbers presented for each of the scenarios were therefore done so on the basis of two different sets of probabilities:

- "P50 values" provide equal odds that the actual volume of constraints might be higher or lower than that predicted.
- "P90 values" leave only a 10 percent probability that the actual volume of constraints would be higher than that forecast and, therefore, a 10 percent chance that the value of X would be insufficient to capture the additional constraints resulting from the use ITEC.

For clarification, it should again be noted that in the numbers presented, no consideration has been given to National Grid's ability to use X at the right time. Perfect foresight of constraints has been assumed which does not take into account any of the uncertainties identified above as factors not considered.

Figure 2 presents some values of X for a scenario of 500MW of ITEC over a four-year period (Scenario 1) and a scenario of 100MW over the same period (Scenario 3) under a P50 scenario, assuming perfect foresight of constraints.

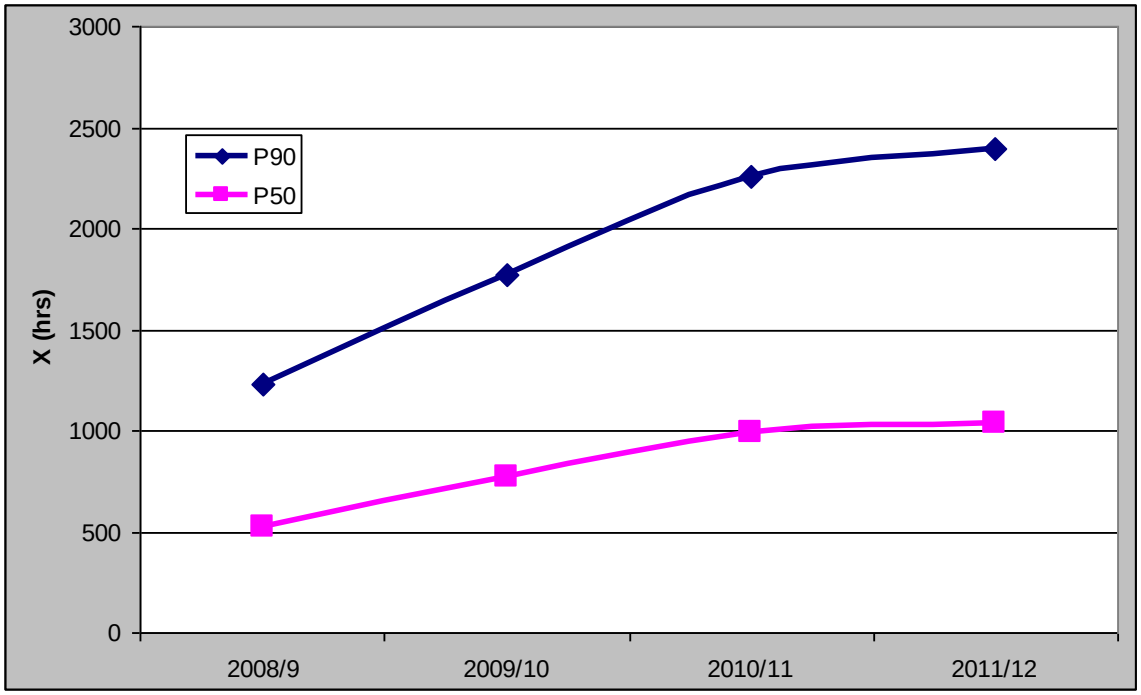
Figure 2. Ranges of ITEC under a P50 scenario



It was noted that the values of X did not differ significantly between applications for 100MW and 500MW. The reason being that 100MW was sufficient to trigger most periods of constraint.

Figure 3 presents some values of X for a scenario of 500MW of Interim TEC over a four-year period (Scenario 1), under P50 and P90 scenarios.

Figure 3. Values of X with differing probability of capturing constraints



It was noted that in order to move from a scenario of having equal odds that the actual volume of constraints might be higher or lower than that predicted, to a more desirable scenario of having 90 percent certainty that the value of X will be sufficient to capture the additional constraints resulting from ITEC, a large increase in the value of X would be necessary.

Ability to capture constraints

Having presented the analysis, it becomes apparent that the ability to capture all constraints is determined by two key factors:

1. setting the value of X sufficiently high to cover for all eventualities; and
2. having the ability to use X with perfect knowledge of the constraint.

It was noted that neither the P50 nor the P90 scenarios represented an option whereby 100 percent of additional constraints would be captured. Neither option therefore, would present a cost-neutral solution to the implementation of an Interim TEC product. Only an X value of 8760 would present such an option.

In arriving at a 'usable' value of X, the timing of the allocation of X becomes crucial if all additional constraints resulting from ITEC are to be captured. There are a number of factors which may change and therefore need to be considered, after X is used (depending on the notification timeframes). These include:

- Generation merit order
- Unplanned outages

} Very uncertain outside of real time

- Planned transmission outages
- Planned generation outages

} Reasonable degree of certainty, but could be subject to change

- Transmission circuit ratings
- Demand

} Can be predicted to a fairly high degree of certainty

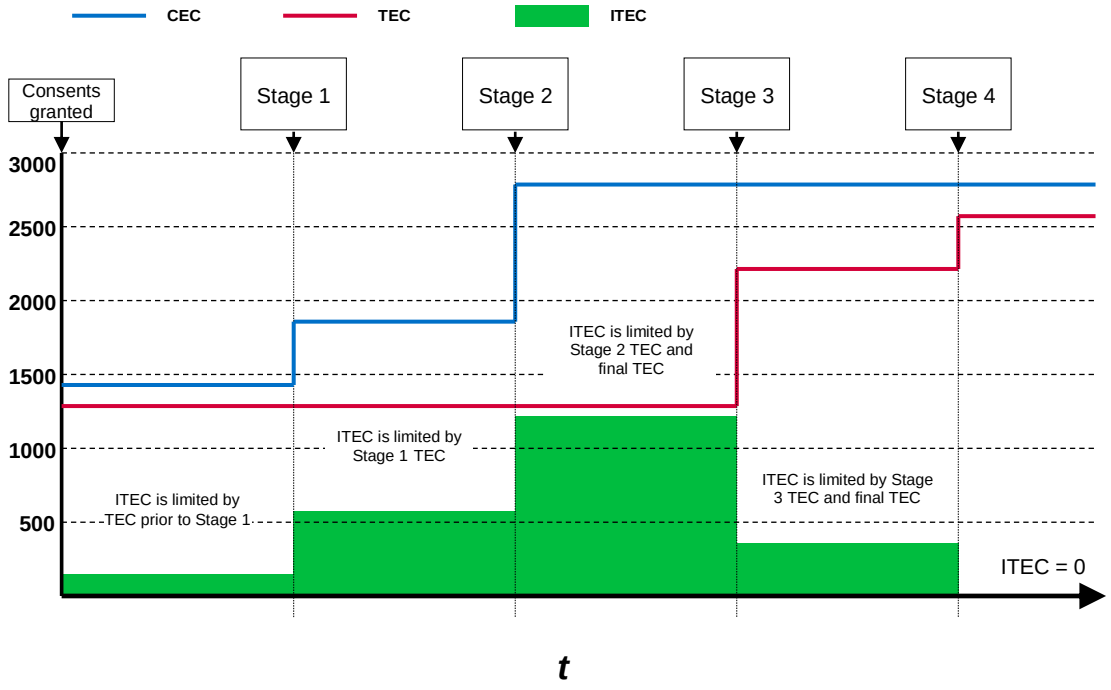
England & Wales Staged Projects

Having considered some potential values of X at the Cheviot boundary, some initial thoughts were shared with regard to how ITEC might work in England & Wales. Generally, this was seen to be more complicated than in Scotland, with a number of limiting factors. These included:

- numerous staged projects;
- smaller number of generators, but much larger volumes of generation; and
- a greater dependency on the behaviour of 'local' generation.

It was identified that with staged projects, the value of ITEC applied for, might not necessarily be the volume of ITEC available at the agreed connection date as additional factors would limit this within certain timescales. These are presented in Figure 4.

Figure 4. Factors affecting value of ITEC



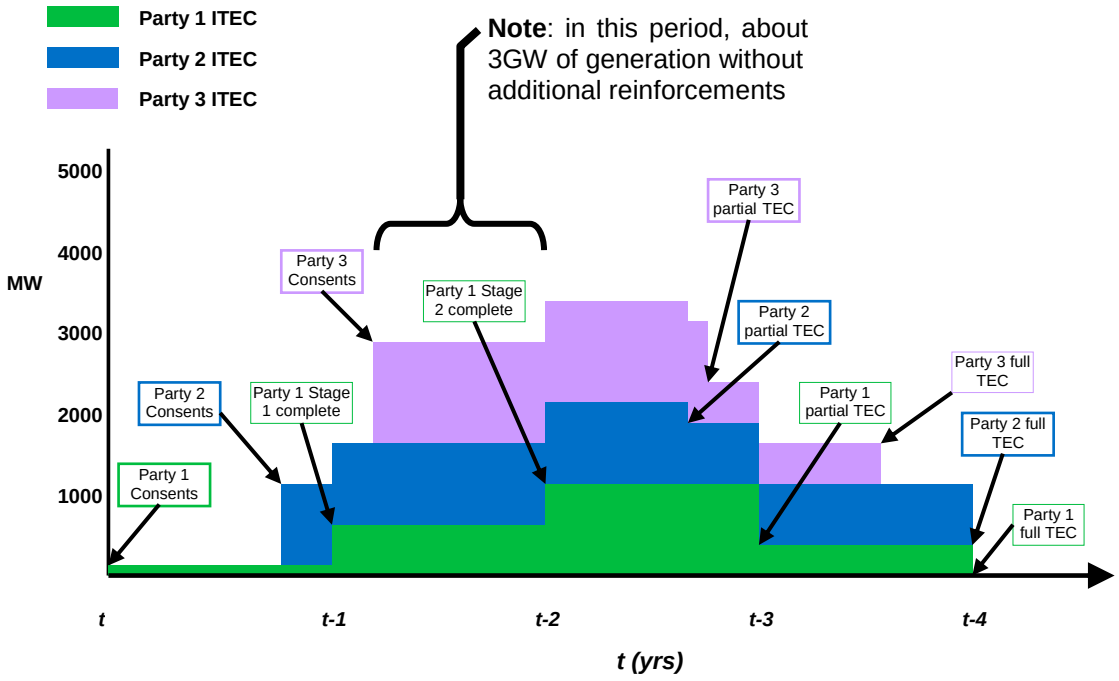
In the example contained in figure 4, the value of ITEC applied for by a single User is limited by the different values of TEC applied for at each stage of a project.

Having considered the limitation on a single party, some consideration was given as to what volumes of ITEC might be applied for in England & Wales where, generally,

generation projects are much larger in scale than those located in the region of the Cheviot boundary.

Figure 5 presents three separate staged projects connecting in a similar location in England & Wales. It can be quickly identified from the potential volumes of generation, that ITEC may not be a usable product in some locations.

Figure 5. Potential volume of ITEC for multiple parties



Annex 6b: The determination and application of X – operational view

National Grid presented an operational view of some illustrative values and ranges of X, having identified trends of approximate constraint capture by interpolating results from operational studies.

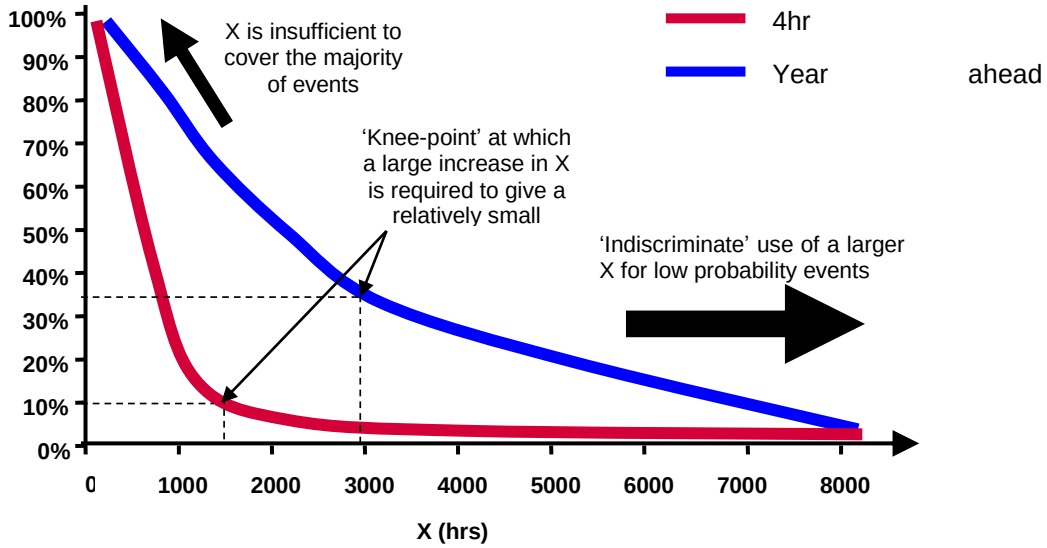
The view presented, was based on a scenario of 500MW of ITEC located at a generic boundary in mid-Scotland, not reliant upon reinforcement of the Beauly-Denny line. The values and ranges represented a snapshot of 2008/9 only, whilst it was noted that the values of X discussed, would only be likely to increase in future years in order to capture similar levels of additional constraint volume.

Model A

Model A assumed the ability of National Grid to curtail the use of ITEC with a notice period of 4 hours, through the allocation of X.

National Grid informed the working group that with such a notice period, a value of X in the region of 1500 hours would be required to capture approximately 90 percent of the additional constraints occurring as a result of 500MW of ITEC, with a probability of 90 percent. It was noted that there would remain a 10 percent chance that such a value of X would not be sufficient to capture 90 percent of constraints. Figure 1 presents in graphical format, with 90 percent certainty, the likely volumes of additional constraints resulting from ITEC which would not be captured by the range of X values.

Figure1. Model A, approximate constraint capture with ranging X



A value of X of 1500 hours was identified as the optimum value for any form of usable ITEC. It was highlighted that any reduction in this value would lead to a sharp increase in the volume of additional constraints not captured by X, whilst any increase in the value would result in only diminishing returns in terms of the additional capture of constraints. It was noted that a minimum value of 8760 hours would be required to guarantee the capture 100 percent of additional constraints resulting from the use of ITEC.

The value of 1500 hours to capture approximately 90 percent of additional constraints is effectively the optimum value from an operational perspective, of a fairly sharp knee-point driven in the main, by the increased certainty of other generation output provided in the form of PNs, the ability of National Grid as SO to predict the availability of wind generation resulting from wind forecasts (and therefore an ability to efficiently allocate X only when the wind is blowing) and unplanned transmission outages.

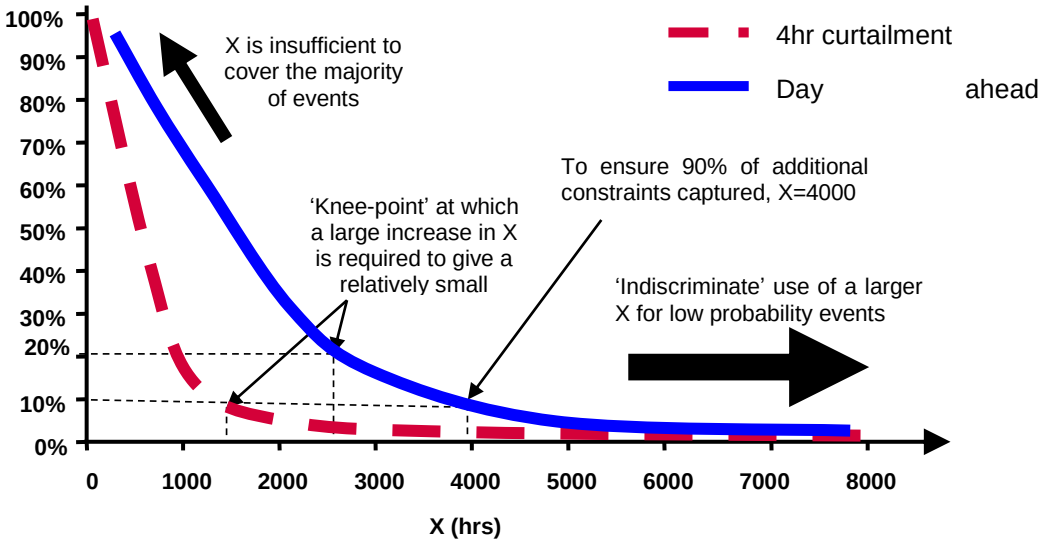
Model A was then compared to an illustrative year-ahead model, where the optimal value of X was identified as 3000 hours, whilst only capturing approximately 35 percent of additional constraints. The increasing volume of constraints not captured results from the reduced certainty of information available to National Grid as SO in terms of the operations of conventional plant, the inability to accurately forecast wind and the inability to forecast unforeseen transmission faults.

Model B

Model B assumed the ability of National Grid to curtail the use of ITEC with a day-ahead notice period, through the allocation of X.

National Grid informed the working group that with such a notice period, a value of X in the region of 2500 hours would be required to capture approximately 80 percent of the additional constraints occurring as a result of 500MW of ITEC in a generic mid-Scotland boundary, with a probability of 90 percent. This is represented in Figure 2.

Figure 2. Model B, approximate constraint capture with ranging X



When compared to Model A, a shallower knee-point was observed with Model B, driven mainly by the increased uncertainty of a generators PN at day-ahead when compared to 4 hours ahead and a reduced ability to accurately forecast wind at day-ahead.

In order to capture approximately 90 percent of constraints as per Model A with a day-ahead model, National Grid communicated that an X value in the region of 4000 hours would be required to achieve this.

Model C

National Grid did not present any ranges or potential values of X for a week-ahead model, but noted that the uncertainty of relevant information available at the week-ahead stage was not dissimilar to that of a year-ahead model and as such, the year-ahead model compared with Model A in figure 1, was observed as being representative of a week-ahead model.

Cost-Benefit

Having presented Model A as being the model which provided the greatest scope for potentially reducing the value of X to an ITEC applicant, National Grid presented some analysis which compared illustrative implementation costs of both Model A and Model B ('B1'). In addition, a variation on Model B ('B2'), which captured ~90% of additional constraints at an X value of 4000 hours when notified day-ahead, was presented. The implementation costs of each option were then compared to the potential additional constraint costs incurred by National Grid as the SO due to the constraint volumes not captured by X. This is presented in Figure 3.

Figure 3. Implementation cost vs values of X and constraint capture

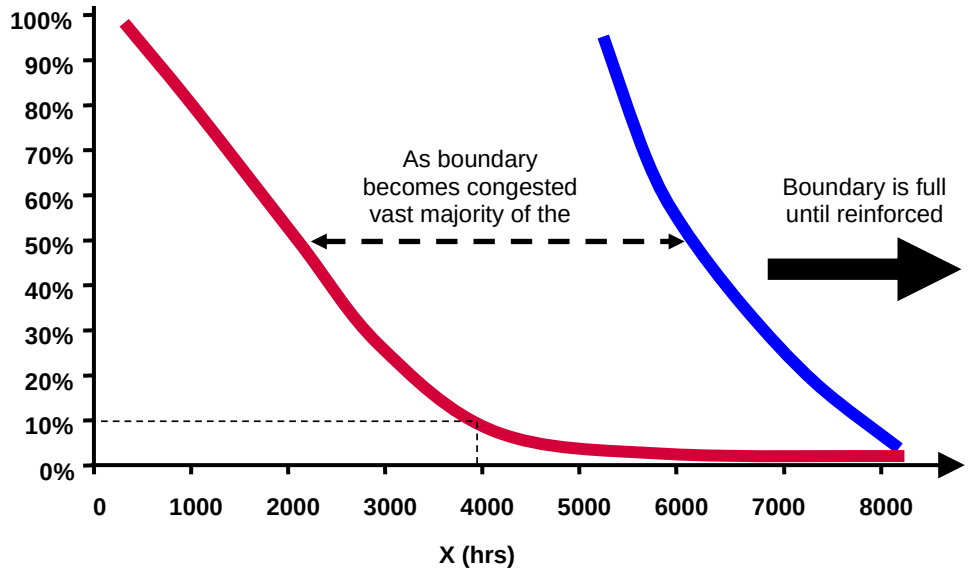
Model	A	'B1'	'B2'
Value of X (hours)	1500	2500	4000
Additional constraints captured (%)	90	80	90
Additional 2008/9 constraint costs (£m)*	~3	~6	~3
Additional cost to National Grid (£m)	~1	~≤0.5	~≤0.5

* Whilst the value of X may allow for control of constraint volume, no control on the cost of those constraints is afforded. For illustrative purposes, an average cost of £100.00/MWh has been assumed in the Figure 3 example.

Beauly-Denny

Having presented some generic analysis on how the various models might be applied at a generic boundary in mid-Scotland, National Grid presented some information based on Model A, in a location reliant upon reinforcement (electrically north) of the Beauly-Denny line. This is represented by Figure 4.

Figure 4. Model A, location reliant upon reinforcement of Beauly-Denny



National Grid forecast that with the ability to allocate curtailment at 4 hours ahead, an X value of approximately 4000 hours would be required in this location to ensure a 90 percent probability, that 90 percent of additional constraints resulting from the availability of ITEC would be captured.

It was noted however, that this value of X was only likely to be the case for the first ~200MW to ~400MW[1] of ITEC, as this is anticipated to be an approximate volume of additional capacity that might be available prior to the reinforcement of the Beauly-Denny line. Following the allocation of this limited volume of ITEC however, it is anticipated that the value of X would quickly head in the direction of 8760 hours as

[1] Unconfirmed volume

the boundary becomes congested for the vast majority of the time, until reinforced. It was noted that this could well result in a 'contract race' for this first trench of capacity available electrically north of Beauly-Denny and reliant upon reinforcement.

Additionally, it was noted that the value of X is likely to increase the further north the location applied for, as a result of the increasing number of boundaries that have to be considered and the increasing likelihood that at any one time, one of these boundaries may 'bite'.

England & Wales
In view of the limited studies undertaken regarding the potential volume of ITEC likely to be available in England & Wales, a brief summary was provided by National Grid. It was noted that for exporting zones, where there is currently very little additional capacity on the transmission system, where additional volumes of ITEC would be likely to congest boundaries for the majority of time prior to reinforcement, the mechanism of ITEC could be very similar than that of north of Beauly-Denny. It was also noted however, that ITEC applications in England & Wales are likely to be for significantly larger volumes of capacity than that applied for north of Beauly-Denny and as such, the ITEC product may not be suitable for many parties.

Annex 6c: Process for accelerating a local connection for Interim TEC

Arrangement for modifying offer
National Grid made a presentation regarding the potential process for accelerating a local connection for access to the transmission system using the ITEC product. It was noted that any generator seeking to use ITEC would require an operational connection in order to export power onto the transmission system, with an efficient construction programme which aligns all works to a single date - that date on which TEC is allocated.

As a consequence, the existing construction programme for any User requesting ITEC would have to be revised in order to facilitate use of the product. This would include revision to transmission works (if transmission connected) and additionally, distribution works (if distribution connected with a BEGA). In order to facilitate the modification of an existing offer, the use of a modification application would be required, with pre-defined timescales and processes, including SO-TO referrals.

National Grid confirmed that work was underway to establish whether or not the construction programme can be accelerated to deliver some of the previously identified transmission works and, if so, by how much. It was noted that the potential impact of this on other Users, could be mitigated by treating additional costs as a one-off charge, whilst any revision would not alter the previously agreed TEC date.

It was envisaged that both the Interim TEC and modification application processes could work alongside each other, although a User would be required to make both forms of application, stating the desired starting date for ITEC. The assessment of ITEC and a revised construction programme would be undertaken simultaneously, leading to both an ITEC offer and a modification offer(s). In this instance, acceptance periods would overlap, with the User (and DNO) required to accept all offers to use ITEC.

Window for ITEC application
National Grid noted that at a previous working group, it had been agreed that all ITEC applications received during an as yet determined window, should be assessed together to optimise the values of X.

National Grid then proposed that:

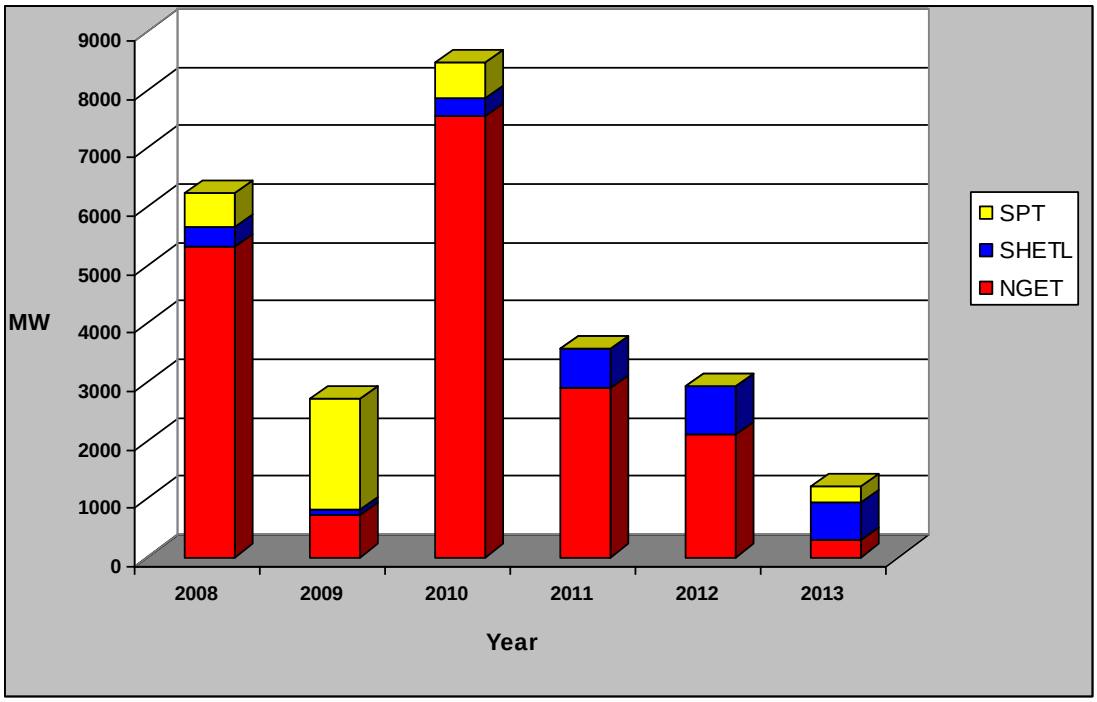
- Users can make ITEC applications up to pre-defined dates each year, suggesting May and June as an appropriate window.
- All applications received, would then be assessed together, over a proposed period of 8 weeks.
- ITEC offers would then be issued, notifying the MW value of ITEC for each year applied for, the value of X allocated to each applicant for each year applied for and the start date driven by the completion of the required local connection.
- All offers would remain open for acceptance for a defined time period, proposed as 10 working days.
- X values would then be reviewed, optimised where applicable (in the event of any User failing to accept an offer) and re-issued to Users that have already accepted the initial offer.

Annex 6d: Potential Use of ITEC

Forecast additional generation

Current GB SYS data indicates a scenario whereby an additional 25,091MW of additional[2] contracted generation will connect to the GB transmission system between 2008 and 2013. This is highlighted in Figure 1, which presents the information on an annual basis, differentiated by TO region.

Figure 1. Annual volume of additional generation by TO region



Potential use of ITEC by TO region

Using the information in Figure 1 to provide an indication of the potential future use of ITEC, the following assumptions have been made:

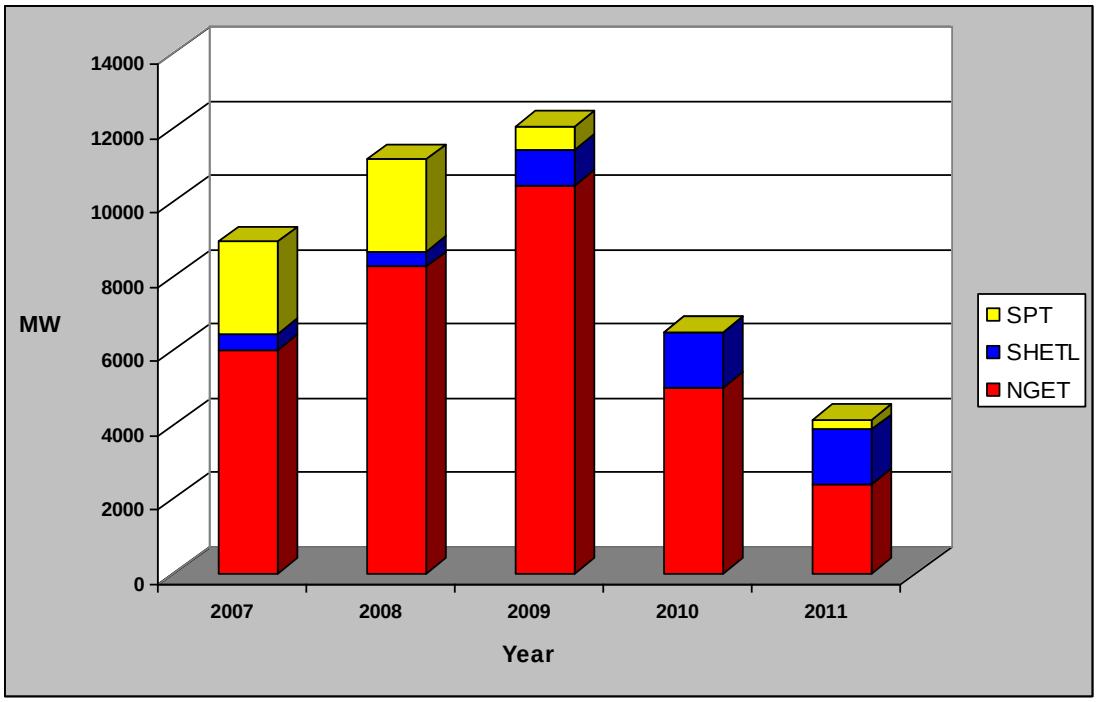
- All dates of TEC allocation are assumed to be 1 January in the relevant year.

[2] 24,647MW of this is in the form of new generation, with an increase in TEC of 444MW at Dinorwig.

- For 2007, the potential volume of ITEC is based on those generators currently contracted to connect to the transmission system in either 2008 or 2009. In this case, any generator applying for ITEC is assumed to be eligible to use the product between 1 January 2007 and the 1 January 2008/09 date of TEC allocation.
- For 2008 and beyond, the potential volume of ITEC is based on those generators currently contracted to connect to the transmission system in the two years subsequent.
- All potential Users of ITEC are therefore assumed to become eligible to use the product two years in advance of their TEC allocation.
- Staged offers have not been considered. All volumes have been considered to be the final volume of TEC applied for.

Figure 2 identifies the potential volumes of ITEC based on contracted generation scheduled to connect to the GB transmission system between 2008 and 2013, assuming a maximum period for eligibility of two years.

Figure 2. Potential volume of ITEC by TO region



Consents status

Figure 3a identifies the consents status for new generation projects in England & Wales at March, 2007. This provides perhaps, a more accurate indication of the more immediate potential applications for ITEC from those generators in England & Wales that have achieved the relevant consents in order to apply.

Figure 3a. Consents status in England & Wales

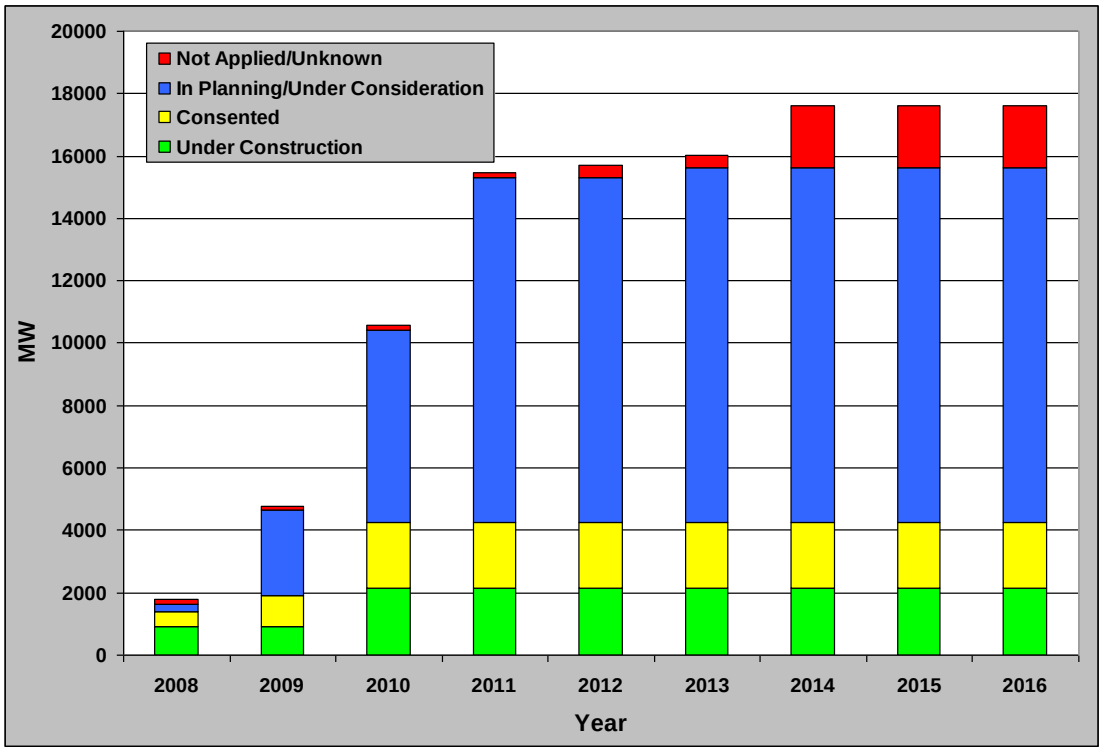


Figure 3b identifies the consents status at March 2007, for generation projects connecting in the SPT region.

Figure 3b. Consents status in the SPT region

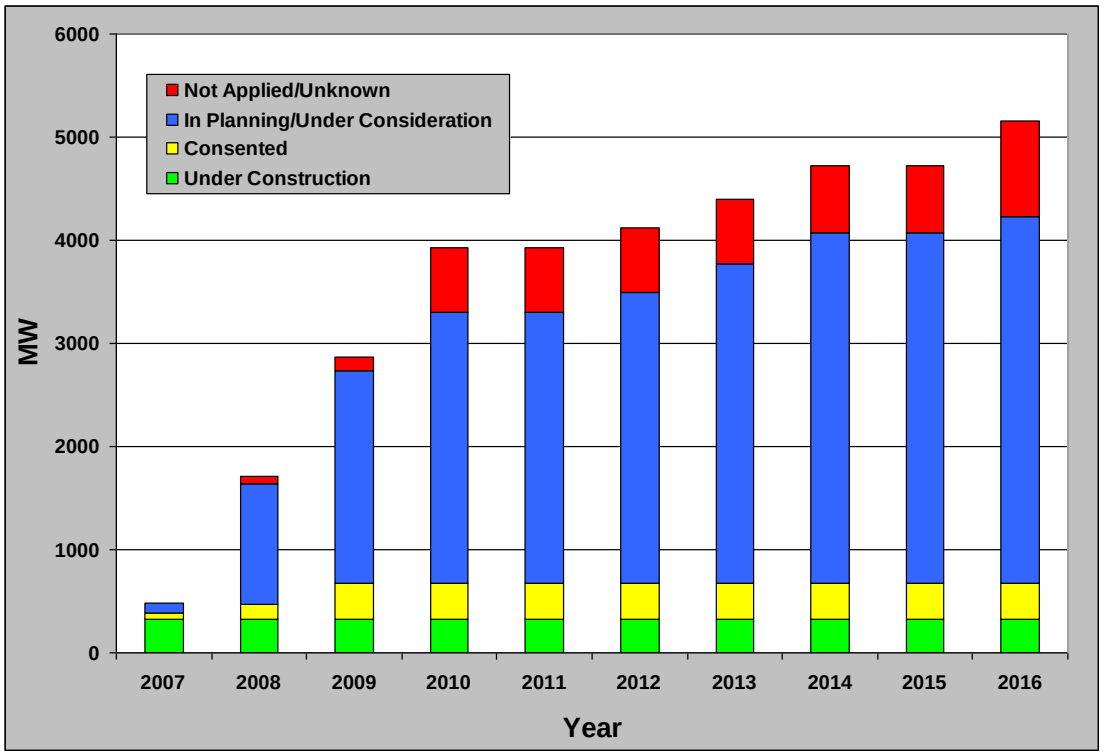
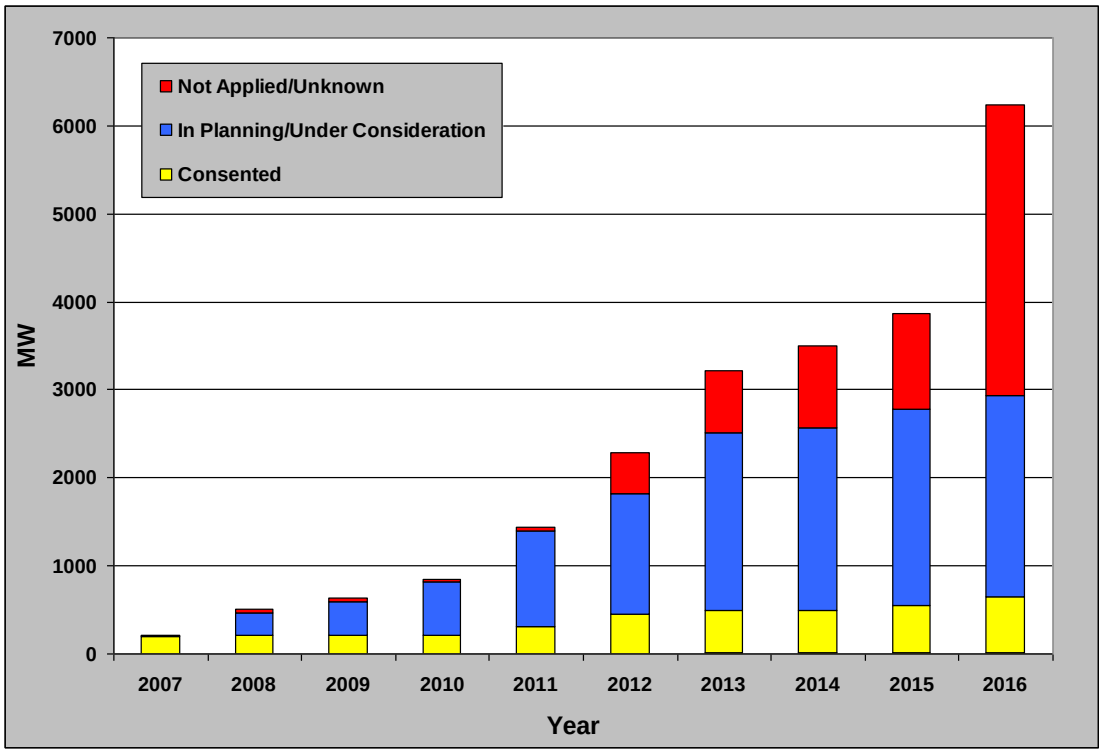


Figure 3c identifies the consents status at March 2007, for generation projects connecting in the SHETL TO region.

Figure 3c. Consents status in SHETL TO region



ANNEX 7 – WORKING GROUP ATTENDANCE

Chair		**11/01/2007**	**19/01/2007**	**29/01/2007**	**21/02/2007**	**09/03/2007**	**16/03/2007**	**26/03/2007**	**16/04/2007**	
Roberts, Hêdd	National Grid	✓	✓	✓	✓	✓	✓	✓	✓	
Technical Secretary										
Viney, Beverley / MacLeod, Liliian	National Grid	✓	✓	✓	✓	N	N	N	N	
In Attendance										
Miller, Richard / Copley, Mark / Baker, Karron	Ofgem	✓	✓	✓	✓	✓	✓	✓	✓	
Working Group Member										**Vote**
Brown, Adam / Maloney, Craig	National Grid	✓	✓	✓	✓	✓	✓	✓	✓	**Y**
Anderson, James	Scottish Power	✓	✓	✓	✓	✓	✓	N	✓	**Y**
Chappell, Thomas	npower - renewables	✓	N	N	✓	✓	✓	N	N	**Y**
Davies, Mike	Wind Energy	N	N	N	N	N	N	N	N	**N**
Ford, Richard	RES Group	✓	✓	✓	✓	✓	✓	N	✓	**Y**
Gowland, Dennis	Fairwind Orkney	✓	N	N	✓	✓	N	✓	N	**Y**
Graham, Garth	Scottish & Southern	✓	✓	✓	N	N	N	N	N	**N**
Jones, Paul	E.on	✓	✓	✓	✓	✓	✓	N	✓	**Y**
Longden, Robert	Airtrictity	✓	✓	✓	✓	N	✓	N	N	**Y**
Lord, Simon	International Power	N	N	N	N	N	N	N	N	**N**
MacLean, Keith	Scottish & Southern	✓	N	N	N	N	N	N	N	**Y**
Morris, John	British Energy	✓	✓	✓	✓	✓	✓	✓	N	**Y**
Morrison, Alec	Scottish & Southern	✓	✓	✓	✓	✓	✓	N	✓	**Y**
Reed, Bill	RWE	✓	✓	✓	✓	N	N	✓	✓	**Y**
Sainsbury, Jeremy	Natural Power	N	N	N	✓	N	N	N	N	**Y**
Taylor, Malcolm	AEP	N	N	N	N	N	N	N	N	**N**
Wilkerson, Dave	Centrica	✓	✓	✓	✓	✓	✓	N	✓	**Y**