

WORKING GROUP REPORT

CUSC Amendment Proposal CAP048 Firm Access and Temporary Physical Disconnection

**Prepared by the CAP048 Working Group
for submission to the CUSC Amendments Panel**

Amendment Ref	CAP048
Issue	1
Date of Issue	17/07/03
Prepared by	CAP048 Working Group

I DOCUMENT CONTROL

Version	Date	Author	Change Reference
0.1	30/06/03	Working Group Chair	Working Group First Draft
0.2	08/07/03	Working Group Chair	Working Group Second Draft
0.3	11/07/03	Working Group Chair	Working Group Third Draft
1	17/07/03	Working Group Chair	Working Group Final

II DISTRIBUTION

Name	Organisation
	Ofgem
CUSC Parties	Various
Panel Members	Various
National Grid Industry Information Website	

III CONTENTS TABLE

I DOCUMENT CONTROL..... 2

II DISTRIBUTION 2

III CONTENTS TABLE 3

1.0 SUMMARY AND RECOMMENDATIONS 4

2.0 INTRODUCTION..... 5

3.0 PURPOSE AND SCOPE OF WORKING GROUP..... 5

4.0 DESCRIPTION OF AMENDMENT PROPOSAL 6

5.0 ALTERNATIVE AMENDMENTS 9

6.0 ASSESSMENT AGAINST THE APPLICABLE CUSC OBJECTIVES 13

7.0 WORKING GROUP ASSESSMENT AGAINST TERMS OF REFERENCE..... 15

8.0 PROPOSED IMPLEMENTATION AND TIMESCALES 16

9.0 IMPACT ON INDUSTRY DOCUMENTS 17

ANNEX 1 – CAP048 AMENDMENT PROPOSAL FORM 18

ANNEX 2 – CAP048 WORKING GROUP TERMS OF REFERENCE 21

ANNEX 3 – INDICATIVE DRAFT LEGAL TEXT TO GIVE EFFECT TO AMENDMENT PROPOSAL CAP048 24

1.0 SUMMARY AND RECOMMENDATIONS

- 1.1 Amendment Proposal CAP048, Firm Access and Temporary Physical Disconnection, (see Annex 1) was proposed by First Hydro on 13th March 2003. The CUSC Amendments Panel (“the Panel”) determined that a Working Group should be established to consider and assess the proposal prior to industry consultation. The Panel determined the Terms of Reference (see Annex 2) for the CAP048 Working Group and required that they report back to the June Panel Meeting.
- 1.2 At the meeting on 19th May, the Working Group agreed that the Chairman should request an extension of one month to the timescales to enable the Working Group to meet its terms of reference and report back to the July Panel meeting. A Working Group Report was submitted to the June meeting of the Panel advising on the Working Group’s progress and requesting an extension to the timescales, set out in the Terms of Reference, of one month. The June CUSC Panel granted a one month extension.

Five Working Group Meetings were held:

Meeting 1	10 th April
Meeting 2	2 nd May
Meeting 3	19 th May
Meeting 4	13 th June
Meeting 5	19 th June

The Working Group at the meeting on the 13th June agreed to establish a sub group to develop the draft legal text and Working Group Report, which were subsequently reviewed by the Working Group. These were held on:

Meeting 1	27 th June
Meeting 2	4 th July

- 1.3 The Working Group has evaluated the Amendment Proposal against the Applicable CUSC objectives in accordance with its terms of reference. The basis of the proposal is that: “ where a CUSC party has purchased firm Connection and Transmission Access, NGC will have an obligation to re-purchase these firm rights if they cannot be delivered.” The Working Group as a whole accepted the case for a compensation mechanism in the event of disconnection where there are no existing contractual methods of payment or compensation.
- 1.4 During the assessment process and because of the broad nature of the Amendment Proposal, a further three Alternative Amendments were developed by the Working Group. The first two alternatives differ only in the basis for the calculation of compensation to be paid in the event that a CUSC party is temporarily disconnected from the system. The third alternative differs on the calculation of the compensation to be paid and the method for determining the volume to which the compensation relates.
- 1.5 The Working Group did not reach a unanimous decision on CAP048. Accordingly, this report sets out the different views of the Working Group members and the relevant issues that should be consulted on in the Industry.
- 1.6 The CAP048 Working Group believes that it has met its Terms of Reference (see sections 4, 5, 6, 7, 8 and 9 in relation to the detail of how the Working Group has met its Terms of Reference) and recommends that the Panel determine that

CAP048 should proceed to wider industry consultation by National Grid and that the consultation paper draws out the pros and cons of the alternative methods of calculating the compensation and seeks views specifically on the different options.

2.0 INTRODUCTION

- 2.1 Transmission Access arrangements are currently under review by the industry. With CAP043, Transmission Access – Definition, National Grid introduced the concept of Transmission Entry Capacity by proposing the introduction of two new Entry Capacity products, Connection Entry Capacity (“CEC”) and Transmission Entry Capacity (“TEC”). CAP043 set out what these capacity products are; CEC is defined on a BMU and Station basis and is the physical maximum output of the BMU or Station; TEC is defined on a Station basis and is the maximum commercial output of a Station in any given Financial Year. The Alternative Amendment to CAP043 was approved by the Authority and implemented on 1st April 2003.
- 2.2 CAP048 as arisen from the implementation of CAP043 which introduced, to a certain extent, the concept of “firm” transmission access rights. The concern of the Proposer is that whilst a CUSC party commits to the level of TEC and CEC, the CUSC does not currently contain details of how NGC can restrict the level of CEC or TEC due to a planned or forced outage that results in temporary physical disconnection of a BMU from the Transmission System. The result of this is that there is no certainty of the level of CEC or TEC that a generator will have access to and therefore its route to market can be, in practise, withdrawn at any time. The Proposer argues that a lack of firmness of transmission rights provides a significant risk and additional cost on Generators and does not provide for an efficient and competitive market in generation.
- 2.3 The Amendment Proposal is intended to establish a compensation mechanism whereby NGC compensate the eligible User for its loss arising from a planned or forced temporary physical disconnection from the transmission system.

3.0 PURPOSE AND SCOPE OF WORKING GROUP

- 3.1 From the outset, it was recognised that it would be a challenge to evaluate CAP048 in isolation, given the other initiatives relating to the development of transmission access arrangements and Modifications under consideration in the BSC forum, regarding compensation for enforced reductions in generator output as a result of faults and constraints on the transmission system, in particular P80 and P87. Furthermore, it was also recognised that the Amendment Proposal has been drafted in such a way that there were likely to be a number of implementation options which the Working Group would need to consider.
- 3.2 In the context of the wider debate on the introduction of new transmission access arrangements, under discussion in the Transmission Access Standing Group, the Working Group agreed that it should take a pragmatic approach. In this context, it has not sought to define “Firm Access”: it agreed to proceed on the basis that CAP 048 represents an incremental development, following the introduction of CAP 043, and that the recommended way forward needs to be consistent with the other developments under consideration.

- 3.3 This report summarises the findings and recommendations of the CAP048 Working Group in respect of their consideration of Amendment Proposal CAP048. This report has been prepared in accordance with the terms of the CUSC and an electronic copy of this document can be found on the National Grid website, at: <http://www.nationalgrid.com/uk/indinfo/cusc/index.html>.

4.0 DESCRIPTION OF AMENDMENT PROPOSAL

- 4.1 Through development in the Working Group the Amendment Proposal has been clarified and given further definition. The Working Group carried out its evaluation under three key areas of definition as follows:

- i) Eligibility
- ii) The circumstances when payments are made
- iii) The basis for payment for disconnection

The Working Group has given consideration to the funding of the Amendment Proposal and Alternative Amendments, however, it has been recognised that this is not within its scope. Nevertheless, it was the view of the Working Group that the means by which NGC is able, if at all, to recover the costs incurred as a result of implementation of CAP048 is likely to have an impact on the extent to which the amendment better meets the Applicable CUSC Objectives.

Eligible User

- 4.2 The criteria to determine if a User is eligible to claim the compensation are where the User:

- i) holds registered Transmission Entry Capacity, "TEC", for that connection site; and
- ii) is subject to generation Transmission Network Use of System (TNUoS) Charges.

- 4.3 By requiring an eligible User to be 'subject to' TNUoS charges, this enables those connections in negative charging zones to claim compensation arising from an Interruption event. This is as opposed to creating the perverse situation if simple reference to 'pays' TNUoS had been used, where this may have had the effect of preventing connections in negative charging zones from being able to claim compensation.

- 4.4 It should be noted that Interconnector Owners will also fall within the scope of this definition. However and, because, in general, it would be the Interconnector Users which would suffer any loss from a reduction in transmission system availability, consequential changes to Interconnector Agreements and to the agreement between the Interconnector Owner and its Users are likely to be required to reflect these new compensation arrangements, should they be implemented.

- 4.5 The Working Group has given consideration to other types of User that may or should be eligible for compensation arising from an Interruption. The criteria to determine an eligible User are limited to a party holding TEC. Clearly this does not enable demand load to claim compensation. The Working Group has considered this sector of customer carefully, however, it does not believe that they can be accommodated within the scope of the Amendment Proposal, given the baseline CUSC that incorporates Amendment CAP043. On this basis in the

remainder of this report, only generation connection sites and Interconnectors are considered.

Interruption Event

4.6 The criteria to determine under what circumstances a User can claim the compensation are as follows:

- i) the User is unable to export from a site as a result of inadequate capacity on the NGC system; and
- ii) a Balancing Mechanism Unit (BMU) is “disconnected” and therefore subject to an Interruption from the system; and
- iii) the consequences of disconnection are not covered under the terms of any other agreement between the User and NGC.

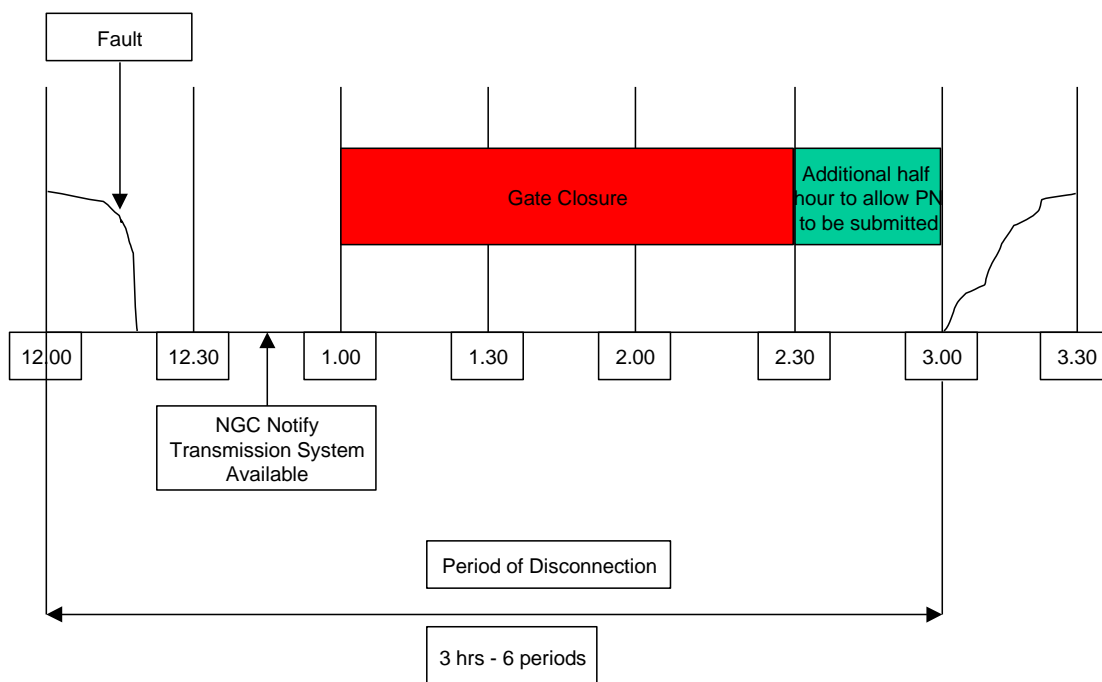
This can be summarised as; the inability of a BMU to synchronise and export power to the NGC Transmission System due to the unavailability of the NGC Transmission System. This would apply for both planned events, such as outages as well unplanned events, such as faults, with the exception of certain exclusions.

4.7 Circumstances that may result in an Interruption, but which would not give rise to payment of compensation are:

- i) Where the prime cause was the Users equipment;
- ii) Force Majeure, as defined in the CUSC;
- iii) A ‘Black Start’ event;
- iv) Operation of the Transmission System under conditions governed by the Fuel Security Code;
- v) Events covered in Section 5 of the CUSC;
- vi) NGC action taken directly as an instruction from the Authority or the Secretary of State;
- vii) Restriction on the connection assets, where the User has elected to have a Customer Choice connection and has consequently agreed to a reduced level of connection security;
- viii) Where the User has another agreement with NGC, which is intended to capture and distinguish constraint payments under the BSC and Intertrip schemes by way of example;
- ix) The BMU is incapable of generation for the period which it is disconnected (using latest notification of OC2 data prior to outage); and
- x) Where the User has available to it any alternative method of compensation (i.e. any compensation under the BSC).

4.8 The duration of an event would be the period between the start of the Interruption resulting in disconnection until the eligible User was notified by NGC that the system was available again. The duration of the event would be determined by NGC. Following receipt of the notification, a further four settlement periods would be granted to enable the User to submit a PN, not including the period in which such notification is received to give the User sufficient time to submit a considered PN. The duration of an Interruption event would therefore correspond to the full settlement periods in which the disconnection occurs plus the subsequent four settlement periods (see Fig. 1 below). The level of compensation would therefore be commensurate with the discrete number of settlement periods that the Interruption Event lasted for.

Fig.1



Level of Compensation

- 4.9 The Amendment Proposal's level of compensation would be intended to cover, and would be limited to, loss of profit from sales of generation, from Balancing Mechanism services/Ancillary services, from imbalance exposure and from Balancing Mechanism bids and offers. The extent recoverable would be limited to the loss an eligible User would be expected to incur under only those contracts directly related to the eligible User and its activities. It would not allow the recovery of 3rd party losses arising from the disconnection of generation. Determination of the level of compensation would be on an ex post basis, following an event that the eligible User believes gives rise to payment under the compensation mechanism.
- 4.10 The User would be entitled to submit a claim for loss of profit following the interruption, which it would submit to NGC for payment. The payment terms have not been considered by the Working Group, but would be expected to be consistent with corresponding terms in industry agreements (see Appendix 3).
- 4.11 The Interruption (or disconnection) of a BMU can result in either part or all of an eligible User's generation being restricted from export to the transmission system. Following the implementation of CAP043, the physical capability of a single BMU is recorded as its CEC. It is common practice for the registered CEC of a BMU or for the sum of BMU's to be greater than the TEC for a connection. The Working Group came to the view that the extent of any "firm" rights for the use of the transmission system is determined by the TEC of a connection. The Amendment Proposal determines the volume to be compensated by adding up the total BMU CEC units Interrupted, up to a limit of the connections TEC. Therefore in the case of a connection comprised of one or more BMU where the sum of the CEC is greater than the TEC, the Amendment Proposal would limit the level of compensation to the TEC, this being the basis on which TNUoS charges for the site are determined.

- 4.12 For example: assuming a generator with 4 BMU's, each with a CEC of 250MW, for a total station CEC of 1000MW, but with a TEC of 500MW. All 4 units are operational but only two can be exporting at any one time because of the TEC limit. Owing to a fault on the transmission system both of the exporting units are Interrupted for half an hour. This disconnected 500MW of generation. The generator would be able to claim its loss, within the scope set out above, for that 500MW of generation, even though it may be able to meet the 500MW short fall from its remaining two units. Had only two units been operational then the amount of compensation payable would still be limited to the 500MW TEC but the generator would not have been able to meet the shortfall.

Treatment of Interconnectors

- 4.13 As noted above, in the case of an Interconnector Owner, it is the Interconnector Owner, which would be directly eligible to claim compensation following a complete disconnection. It is the Interconnector Users, however, which hold the individual BMU's that comprise the Interconnector and any incremental reduction in transmission capability would result in a scaling back of the individual BMU's. An alternative to this might be for the eligibility tests to include 'a reduction of TEC resulting in any Interconnector Users' trading capability'. In any event it will be a matter for the Interconnector Owner to introduce arrangements in its agreements to pass on any compensation received. The scope of that compensation may also be limited as the Interconnector Owner and Users are not necessarily exposed to all of the four areas of loss that would be recoverable.

Disputes

- 4.14 Where the claim is disputed, on either grounds of eligibility, duration or amount, it will be subject to the existing CUSC rules on dispute resolution.

Implementation

- 4.15 The principles of the Amendment Proposal set out above can be entrenched within the CUSC. It is the opinion of the Working Group, having considered other alternatives, that this is the most appropriate method of setting out the principles of the compensation mechanism.
- 4.16 The Working Group has considered the use of Transmission Related Agreements (TRA) as initially advocated in the Amendment Proposal. It has been argued that both NGC and the affected eligible User could enter in to a TRA before the event, where it was known to occur, and was not subject to one of the exclusions, to agree an appropriate level of compensation. Whilst it is accepted that there may be some merit in NGC and an eligible User to entering in to a separate contract to manage the level of exposure arising from an Interruption Event, the Working Group has determined that the option does not need to form part of the Amendment Proposal and should be left as a matter of choice for the User and NGC.

5.0 ALTERNATIVE AMENDMENTS

- 5.1 The original Amendment Proposal was drafted sufficiently widely that it was recognised by the Working Group that more than one compensation mechanism could be consistent with the principles embodied in the proposal.

- 5.2 The Working Group agreed on the criteria of the original Amendment Proposal for determining eligibility and circumstances (as set out in Section 4). The Working Group, however, did not reach a consensus on the method of determining the level of compensation.
- 5.3 Through development in the Working Group three Alternative Amendments were considered, to give consideration to all the possible options. In all three, the main difference is how the level of compensation is determined. Alternative A closely mirrors the original Amendment Proposal but determines an average pre-estimate of the loss to the User. Alternative B is similar to Alternative A except that it seeks to compensate on the basis of the cost of the transmission capacity. Alternative C is similar to Alternative B, except that it determines a cost and market based level of compensation and determines the volume of capacity to be compensated for differently from that of the original Amendment Proposal and Alternatives A and B.

Alternative A

- 5.4 This first Alternative Amendment developed by the Working Group is intended to create an average pre-estimate of an eligible User's loss to derive a £/kW value. All other criteria that apply to the original Amendment Proposal also apply to this Alternative, except that the level of compensation is determined on an ex ante basis and the method of determining the level of compensation is different.

The value would be determined by the following calculation:

L= annual Load shape 44 (£/MWh)
 B= annual average BSUOS charge (£/MWh)
 F= typical fuel Cost for generator (£/MWh)
 BM= Annual cost of BM Offers plus BM Bids
 BS= Annual balancing services income
 TEC= Sum of all TEC (KW)
 VOL= Annual volume of energy generated (MWh)
 CON= Annual contract volume (VOL-Offer Volume+Bld Volume)(310-2.8+8.4)=316

$$\frac{(L*CON)-((F+B)*VOL)+BM+BS}{TEC}$$

$$\frac{(\pounds 19.6*316m)-((\pounds 13+0.65)*310m)+\pounds 180m+\pounds 60m}{65000MW}$$

This would produce a value of approximately £34/kW/Year.

$$\frac{\pounds 34/kW*1000 = \pounds 34,000MW}{17520 \text{ (Number of Settlement Periods in a Year)}}$$

This would produce a value of approximately £2*MW/Settlement Period.

(*Note these values are for information purposes. The final value is to be confirmed).

- 5.5 The figure would be directly inserted in to the CUSC and would be indexed to the Retail Price Index to take in to account annual change in the value of the level of compensation, although it may be more appropriate to link any change to other forms of indexes. Should the value no longer reflect the average loss then a CUSC Amendment Proposal would need to be raised to change the value.
- 5.6 This level of compensation effectively reflects the average value that could be expected to be recovered under the original Amendment Proposal but reduces the likelihood of disputes as to the level of compensation as this would be clearly established within the CUSC.
- 5.7 Continuing the example in paragraph 4.10, with the loss of 500MW of generation, for a period of disconnection lasting for 2.75 hours (or six Settlement Periods), the loss would be:

$$500\text{MW} * \text{£}2 * 6(\text{Number of Settlement Periods}) = \text{£}12,000$$

Alternative B

- 5.8 The second Alternative Amendment adopts a compensation mechanism that is derived from both TNUoS and Connection Charges. A minimum ex ante level of compensation is specified, based on average TNUoS and Connection Charges to enable eligible Users in negative charging zones to receive a level of compensation. For Users in higher charging zones, compensation is based on actual TNUoS and Connection Charges. All other criteria that apply to the original Amendment Proposal also apply to this Alternative: i.e. the only differences are that the level of compensation is determined on an ex ante basis and the level of compensation is related to the NGC charges rather than any loss incurred.

The level of compensation would be determined by the following formula:

MAX of

$$\frac{\Sigma \text{Total generation TNUoS} + \text{Total generation Connection}}{\Sigma \text{Total system TEC}}$$

This would then be divided by 17520 to determine a £/MW/Settlement Period Value.

Or

$$\frac{\text{Site TNUoS} + \text{Site Connection Charges}}{\text{Site TEC}}$$

This would then be divided by 17520 to determine a £/MW/Settlement Period Value.

- 5.9 This formula would be entrenched within the CUSC. The values used in the calculation would be those as at 31st March in the year that the Interruption event occurred. Where the Interruption event continues in to a new year then the values as at 31st March of that year will apply and so on.
- 5.10 This level of compensation is intended to compensate for the cost of the transmission entry capacity paid to NGC: it also reduces the likelihood of disputes as to the level of compensation as the calculation for determining the value would be certain.

- 5.11 For example, using our example from before, an Interruption resulting in a disconnection of 500MW for 2.75 hours (therefore 6 Settlement Periods), the following compensation would be paid:

$$\frac{\text{Assuming } \pounds 250 \text{ million for total generation TNUoS and Connection}}{65,000 \text{ MW}}$$

$$= \pounds 0.22 / \text{MW} / \text{Settlement Period} * 500 \text{ MW} * 6 = \pounds 660$$

Alternative C

- 5.12 The final Alternative Amendment seeks to differentiate between the level of compensation paid for those Interruption events where an Eligible User is notified by NGC of the likely Interruption, such as planned outages. This is against those Interruption events where NGC is not able to provide any notice, such as faults on the system. This Alternative Amendment also differs from the original Amendment Proposal by determining the quantity of generation differently, by deducting the available unit's CEC from the TEC. In addition, to simplify the Interruption Payment, it will be paid at a daily rate for any Interruption Periods that occur in that day or part of a day.
- 5.13 For planned events, compensation would be provided on a £/MW basis. This would be calculated as follows:

MAX of

$$\frac{\text{Total generation TNUoS}}{\Sigma \text{Total system TEC}}$$

This would then be divided by 365 to produce a £/MW/day value.

Or

$$\frac{\text{Site TNUoS Charges/TEC}}{365 \text{ to produce a } \pounds / \text{MW} / \text{day value}}$$

- 5.14 This value is effectively intended to rebate TNUoS charges on a daily basis. Given that northern generators will be paying more, the higher of the average or actual payment figure should be used. Compensation is then payable based upon the number of MW disconnected at a rate of 1/365 per day in which a disconnection occurs. This ensures that in the event of more than one disconnection in a day only one payment is made. As an example a 660MW unit in the North would receive approximately £16k per event. This effectively rebates the generators capacity charge for the loss of access to the transmission system for a day or part thereof arising from a disconnection. For those in negative charging zones it also provides for a level of compensation.
- 5.15 It is proposed that for unplanned event's compensation calculated using the Market Index Price, as published on the BMRS, would be used for the first 24 hours of an event or fault. After this first twenty-four hour period the level of compensation will revert to that outlined above.
- 5.16 Whilst this does not fully reflect the losses that a generator will incur as a result of the interruption, it is intended to reflect the additional disruption an unplanned outage places on generators. It also reflects the original Proposals intention of compensating less when notice is given and more when no notice is received.

- 5.17 The method of determining the quantity that has been Interrupted is also different to the original Amendment Proposal. In the event of an Interruption, the amount Interrupted is determined by deducting the CEC of the first and subsequent units from the TEC. This can be expressed as $TEC_{station} - \sum \text{Available Remaining } CEC_{unit} = \text{Volume for Compensation}$.
- 5.18 By way of example, continuing the example set out in paragraph 4.10 with the four BMU's each with a CEC of 250MW, a station CEC of 1000MW but a TEC of 500MW. All four units are operational, but only two can export at any one time because of the TEC limit. Were one unit to be Interrupted, the eligible User would be able to meet the short fall with one of its two remaining units, the TEC of 500MW is still available so the compensation payable would be zero. Were two units to be Interrupted, the same circumstances would apply, as the generator would be able to meet the short fall by exporting with the second unit that was not originally exporting. In this case the 500MW TEC remains so the compensation payable will be zero. If the third unit were to be Interrupted then 250MW would be deducted from the TEC, so the compensation payable would relate to the 250MW of TEC that was restricted. To continue the example, if the fourth unit was also Interrupted then the TEC would be reduced by the final 250MW. This would mean that the TEC could not be met and therefore the level of compensation would relate to the full 500MW of TEC that had been Interrupted, as, for the duration of the Interruption, it would not be available.
- 5.19 In this case, for a planned event resulting in the Interruption of the full 500MW TEC, the amount of compensation would be, assuming the average value:

$$\frac{\text{Assuming } \pounds 150 \text{ million for total generation TNUoS}}{65,000 \text{ MW}}$$

Divide by 365

$$= \pounds 6.32 / \text{MW/day} * 500 \text{ MW} = \pounds 3160 / \text{day}$$

In the case of an unplanned event, assuming a Market Price of £20MWh, the level of compensation would be £240,000 for the first day and £3160 for each day or part thereof afterwards.

6.0 ASSESSMENT AGAINST THE APPLICABLE CUSC OBJECTIVES

- 6.1 CUSC Amendments are required to be assessed in terms of their ability to better facilitate achievement of the Applicable CUSC Objectives. These are set out in Paragraph 1 of Condition C7F of National Grid's Transmission Licence and can be summarised as follows:
- the efficient discharge by National Grid of the obligations imposed on it by the Act and the Transmission Licence; and
 - 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.
- 6.2 The Working Group is agreed that the Amendment Proposal better facilitates the Applicable CUSC Objectives by providing an incentive to National Grid to reduce the likelihood of disconnection by requiring it to pay compensation where it disconnects an eligible User. This would promote the better management and

- operation of the Transmission System. To give affect to these benefits changes will be required to NGC's charging and incentive schemes.
- 6.3 By having the potential benefit to reduce the likelihood of disconnection this would support the facilitation of competition in the market by providing greater reliability and certainty in the knowledge that the User will have access to the market. Where a disconnection still occurs, the payment of compensation would continue to promote competition as an eligible User would be compensated for some of the costs it may face arising from the disconnection.
- 6.4 The majority of the Working Group considers that the original Amendment Proposal best achieves the Applicable CUSC Objectives. This is because it was felt that the original Amendment Proposal provides for the full cost of the loss of access to the transmission system to be compensated by NGC, thereby exposing NGC to the full costs of its actions. This would reduce the overall risk of the eligible User and may also have the added benefit of reducing business interruption insurance premiums, as a risk that is outside of its control would now be compensated for. It was also argued that this placed the correct incentives on NGC to minimise outage cost and duration.
- 6.5 Several members of the Working Group also recognised the simplicity provided by Alternative's A and B, with the majority of that grouping preferring Alternative A, in lieu of the original Amendment Proposal, for the same reasons as the original Amendment Proposal. This is because it was considered to be a fair pre-estimate and would have the advantage of allowing NGC to better assess in advance the cost to it of an outage. These members were not supportive of Alternatives B and C as it was felt that these did not adequately reduce the eligible Users risk sufficiently nor recognise the value of the product that had been withdrawn and it would therefore see its position little changed in terms of overall risk. In the case of Alternative C this was criticised for not recognising the link between TNUoS and Connection Charges.
- 6.6 A minority of the Working Group did not support the original Amendment Proposal. They argued that the compensation pad to the User should relate to the loss of access and not the loss of profit. Of this minority group, the preferences were split between Alternatives B and C.
- 6.7 This grouping argued that any compensation that is calculated after the event would, by definition, be unable to give NGC the correct incentives as only the generator would have knowledge of the value they place on their transmission access. Also, any compensation payment based upon the value a generator places on access is not consistent with the payment for that product based on its cost. Payment of value based compensation by NGC could incentivise NGC to over invest in assets (to above the existing planning standards) to mitigate the risks, which would lead to higher connection charges for generators.
- 6.8 In addition, the minority group argued that if the proposed charging boundary change to 'Plugs' goes ahead this may represent a cross-subsidy from flexible plant to inflexible plant. This is due to the rationale that inflexible plant inherently has extended dynamics and the loss of profit element will be calculated over a longer period. Several members of the Working Group questioned this particular argument, as the overall loss may depend on the type of plant and the time of year in which an Interruption occurs.
- 6.9 The minority group argued that value based compensation could be appropriate if access rights were valued based, however, this implies a fundamental change to

the Transmission Access regime that was argued as being beyond the scope of this amendment proposal. Concern was also expressed that compensation based on a loss of profit would give the generator an incentive not to align its outages with NGC outages, which is inconsistent with the requirements of the Grid Code and would prevent NGC from operating an economic and efficient transmission system.

- 6.10 Further the size of payments was considered, as payment for alternative B was considered to be effectively too small to give NGC an appropriate incentive. However, alternative C which has the Market Price derived payment, in recognition of the additional disruption unplanned outages place on generators, leads to a significant payment which it was argued gives an appropriate incentive to NGC to restore the faulted equipment. In addition, it was argued that alternative C is the only option that recognises the flexibility that the generators have gained from the TEC term within its payment calculation.
- 6.11 Concern was expressed broadly however as to the cost of meeting the compensation. As the payment mechanisms are not known it is difficult to determine how much the compensation would cost the industry and how much would cost NGC. This may ultimately have a bearing on the merit of each of the original Amendment Proposal and three alternatives, particularly in relation to whether the compensation is intended to reflect the loss of profit or to reflect the cost of NGC charges.

7.0 WORKING GROUP ASSESSMENT AGAINST TERMS OF REFERENCE

- 7.1 The CUSC Panel established Terms of Reference for the Working Group (see Annex 2). The Working Group believes that it has satisfied these Terms of Reference in working to develop the original Amendment Proposal. The Amendments Panel has been advised of progress of the Working Group when appropriate and has worked to its own developed internal working procedures. The Working Group has given consideration to Alternative Amendments, the detail of which are set out below, and developed draft legal text as required (see Annex 3). In each case these have been assessed against the Applicable CUSC Objectives.
- 7.2 In considering the Amendment Proposal and any alternatives, the Working Group has paid significant attention to the requirements of paragraph 6 of the Terms of Reference. The Working Group believes it has satisfied these objectives as follows:
- i) The Working Group has adopted the term 'Interruption' to reflect a loss of access to the Transmission System, in order to distinguish such an event from the present meaning of 'Disconnection' in the CUSC and therein avoid any confusion.
 - ii) The Working Group has considered the significant risks and additional costs arising from a lack of firmness of transmission rights. The two principle risks identified are that there is a risk that an eligible User could be exposed to losses for under delivering on its existing contracts and secondly that it is restricted from entering in to new, profitable contracts. The additional costs that may be incurred are those faced by an eligible User in sourcing the lost generation, either through imbalance or other market mechanisms. It may also incur additional costs arising from its wider contractual terms for failing to deliver.

- iii) The Working Group has established the criteria for determining whether a User is eligible to claim and receive compensation as envisaged by CAP048. This is detailed under the Amendment Proposal.
- iv) Mechanisms to appropriately determine the amount of compensation have been considered by the Working Group. Consideration has been given to Transmission Related Agreements, the NGC Charging Methodologies and to entrenching the appropriate provisions within the CUSC. The merits of which are considered under the analysis of the Amendment Proposal and Alternative Amendments.
- v) Disputes shall be determined under existing CUSC rules.
- vi) The criteria for establishing eligibility to claim compensation have been established for the Amendment Proposal and each Alternative Amendment. This is considered under the analysis of the Amendment Proposal and each Alternative Amendment Proposal.
- vii) Consideration has been given to the impact upon NGC billing systems. There is considered to be no significant impact in the light of the limited number of occasions on which interruption is expected to arise: consequently, any payment of compensation shall be billed on an ad hoc basis.
- viii) The relevant sections of the CUSC that require amendment arising from the Amendment Proposal and any Alternative Amendment has been considered under Annex 3 – Indicative Draft Legal Text to give effect to CAP048, specifically these are Sections 5, 6 and 11.
- ix) In considering the criteria for determining whether a User is eligible to claim compensation, the Working Group has considered the extent that the Amendment Proposal and each Alternative Amendment may or may not unduly discriminate between Users. The Working Group has concluded that none of these arrangements would unduly discriminate.
- x) The Working Group has no views that need to be represented to the charging forum. The Working Group does not consider the regulatory treatment of the compensation payments to be directly within its scope and terms of reference.
- xi) The Working Group has considered the appropriate time-scales for implementation of the Amendment Proposal or one of the Alternative Amendments. This is set out below under Section 8 – Proposed Implementation and Timescales.

7.3 In considering these items, the Working Group took in to account that the number of circumstances where these arrangements would apply would be very limited. NGC summarised the historical numbers of occurrences of when the compensation would have been paid. For unplanned events the number is on average 2 in any year. There have been no planned events that have caused an Interruption that would result in a disconnection since Vesting 1990.

8.0 PROPOSED IMPLEMENTATION AND TIMESCALES

8.1 The Working Group considered the implementation and timescale issues. The Working Group proposes that an implementation of April 2004 is appropriate. This is consistent with the commencement of the new Financial Year and the introduction of any new charging arrangements for connection and use of system.

9.0 IMPACT ON INDUSTRY DOCUMENTS

- 9.1 The Working Group has identified no specific changes to other Core Industry Documents. However, in its deliberations on the funding of the compensation payments the Working Group has identified that changes to NGC's Charging Statements and SO Incentives may be required. This will be a matter for NGC and Ofgem to progress in anticipation of the Amendment Proposal being approved and implemented.

ANNEX 1 – CAP048 AMENDMENT PROPOSAL FORM

CUSC Amendment Proposal Form	CAP: 048
Title of Amendment Proposal:	
Firm Access and Temporary Physical Disconnection	
Description of the Proposed Amendment <i>(mandatory by proposer):</i>	
<p>Where a CUSC party has purchased firm Connection and Transmission Access, NGC will have an obligation to re-purchase these firm rights if they cannot be delivered.</p> <p>An obligation will be included in CUSC, which will oblige NGC to purchase CEC_{BMU}, and/or TEC_{Station} in response to system needs. When the Transmission System (connection or infrastructure) has a reduced level of availability due to planned or forced outage that results in the temporary physical disconnection of a Generating Unit, NGC will be required buy back CEC and/ or TEC capability from the user via one of two mechanisms:-</p> <p>a) NGC enter into a bi-lateral Transmission Related Agreement (TRA) such that the user has a reduced level of CEC and/or TEC</p> <p>b) NGC buy back from the user CEC and /or TEC capability at a price that is set down in the Connection Charging Methodology and/or the Use of System Charging Methodology.</p> <p>The obligation on NGC to purchase CEC and/or TEC via a) or b) above will be included in the CUSC</p> <p>If NGC purchase CEC and/or TEC via a) the price will be negotiated bilaterally. If NGC purchase CEC and/or TEC via method b) the price and methodology will be set down in the relevant charging methodology.</p>	
Description of Issue or Defect that Proposed Amendment seeks to Address <i>(mandatory by proposer):</i>	
<p>The CUSC currently does not contain details of how NGC can restrict the level of CEC or TEC due to a planned or forced outage that results in temporary physical disconnection. The result of this is that there is no certainty of the level of CEC or TEC that a generator will have access to and therefore its route to market can be withdrawn at any time.</p> <p>The lack of firmness of transmission rights provides significant risk and additional cost on Generators and does not provide for an efficient and competitive market in generation.</p>	
Impact on the CUSC <i>(this should be given where possible):</i>	
<p>Changes to CUSC include</p> <p>Additional sub-sections in CUSC sections 2 and 9 which place an obligation on NGC to purchase CEC where it cannot deliver the contracted level due to planned or forced outage resulting in temporary physical disconnection, at a price determined in the charging methodology or the TRA.</p> <p>Additional sub-sections in CUSC 3 and 9 which place an obligation on NGC to purchase TEC where it cannot deliver contracted levels due to planned or forced outage resulting in temporary physical disconnection, at a price set down in Use of System charging methodology or the TRA.</p>	
Impact on Core Industry Documentation <i>(this should be given where possible):</i>	
<p>Changes would be required to fully implement this proposal to the Connection Charging Methodology and the Use of System Charging Methodology These changes would need to detail the methodology for determining the CEC and TEC buy back price.</p>	

<p>The issues that will need to be considered are</p> <ol style="list-style-type: none"> 1) The Connection Charge 2) The Use of System Charge 3) The loss suffered by the generator as a result of the reduced CEC and TEC level 4) The interaction of CEC and TEC 	
<p>Impact on Computer Systems and Processes used by CUSC Parties <i>(this should be given where possible):</i></p> <p>NGC billing systems</p>	
<p>Details of any Related Modifications to Other Industry Codes <i>(where known):</i></p>	
<p>Justification for Proposed Amendment with Reference to Applicable CUSC Objectives** <i>(mandatory by proposer):</i></p> <p>This modification will enable NGC to manage forced outages and planned outages that result in temporary physical disconnection by buying back TEC and CEC levels thus promoting more efficient use of the transmission system. This will enable National Grid to more easily and efficiently discharge its obligations under the Act and the Transmission Licence and fulfil its obligations to facilitate competition in the generation and supply of electricity.</p>	
<p>Details of Proposer: Organisation's Name:</p>	<p>First Hydro Company</p>
<p>Capacity in which the Amendment is being proposed: (i.e. CUSC Party, BSC Party or "energywatch")</p>	<p>CUSC Party</p>
<p>Details of Proposer's Representative: Name: Organisation: Telephone Number: Email Address:</p>	<p>Simon Lord First Hydro Company 0870 238 5501 slord@edisonmission.com</p>
<p>Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address:</p>	<p>Kevin Dibble First Hydro Company 0870 238 5523 kdibble@edisonmission.com</p>
<p>Attachments (Yes/No):No If Yes, Title and No. of pages of each Attachment:</p>	

Notes:

1. Those wishing to propose an Amendment to the CUSC should do so by filling in this "Amendment Proposal Form" that is based on the provisions contained in Section 8.15 of the CUSC. The form seeks to ascertain details about the Amendment Proposal so that the Amendments Panel can determine more clearly whether the proposal should be considered by a Working Group or go straight to wider National Grid Consultation.
2. The Panel Secretary will check that the form has been completed, in accordance with the requirements of the CUSC, prior to submitting it to the Panel. If the Panel Secretary accepts the Amendment Proposal form as complete, then he will write back to the Proposer informing him of

the reference number for the Amendment Proposal and the date on which the Proposal will be considered by the Panel. If, in the opinion of the Panel Secretary, the form fails to provide the information required in the CUSC, then he may reject the Proposal. The Panel Secretary will inform the Proposer of the rejection and report the matter to the Panel at their next meeting. The Panel can reverse the Panel Secretary's decision and if this happens the Panel Secretary will inform the Proposer.

The completed form should be returned to:

Richard Dunn
Panel Secretary
Commercial Development
National Grid Company plc
National Grid House
Kirby Corner Road
Coventry, CV4 8JY
Or via e-mail to: CUSC.Team@uk.ngrid.com

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

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

ANNEX 2 – CAP048 WORKING GROUP TERMS OF REFERENCE

CUSC – CAP048 Working Group Firm Access and Temporary Physical Disconnection

TERMS OF REFERENCE

Introduction

1. CUSC Amendment Proposal CAP048 seeks to oblige NGC to re-purchase firm Connection and Transmission Access rights purchased by a CUSC Party if these rights cannot be delivered.

An obligation will be included in CUSC which will oblige NGC to purchase CEC_{BMU} , and/or $TEC_{Station}$ in response to system needs. When the Transmission System (connection or infrastructure) has a reduced level of availability due to planned or forced outage that results in the temporary physical disconnection of a Generating Unit, NGC will be required buy back CEC and/ or TEC capability from the user via one of two mechanisms:

- a) NGC enter into a bi-lateral Transmission Related Agreement (TRA) such that the user has a reduced level of CEC and/or TEC.
- b) NGC buy back from the user CEC and /or TEC capability at a price that is set down in the Connection Charging Methodology and/or the Use of System Charging Methodology.

The obligation on NGC to purchase CEC and/or TEC via a) or b) above will be included in the CUSC

If NGC purchase CEC and/or TEC via a) the price will be negotiated bilaterally. If NGC purchase CEC and/or TEC via method b) the price and methodology will be set down in the relevant charging methodology.

2. This paper outlines the terms of reference that the Working Group should work to regarding CAP048.

Relationship with Amendments Panel

3. The CAP048 Working Group shall seek the views of the Amendments Panel before taking on any significant amount of work. Where the group requires instruction, clarification or guidance from the Amendments Panel, particularly in relation to their Scope of Work, the Chairman should contact the CUSC Panel Secretary.

Meetings

4. The CAP048 Working Group shall develop and adopt its own internal working procedures and provide a copy to the Panel Secretary.

Terms of Reference

5. This Working Group has been actioned to act as such for the purposes of consideration of CAP048 in line with the Amendment Procedures described in Section 8 of the CUSC.

6. In considering the Amendment proposal CAP048 the Working Group shall:
- i) Identify a suitable term for “disconnection” (or identify that no conflict or confusion will arise as a result of its use elsewhere);
 - ii) Identify the scope of the 'significant risk and additional costs' that the lack of firmness on transmission rights could have on Users;
 - iii) Determine standards of connection for which a ‘disconnection’ event is valid (i.e. are “customer choice” connections excluded and if so how?);
 - iv) Determine the appropriate mechanisms to enable National Grid to compensate for temporary “disconnection”;
 - a) bi-lateral Transmission Related Agreement so that the user has a reduced level of CEC and/or TEC;
 - b) Charging Methodology based values (positive & negative charging zones);
 - c) Others;
 - v) Determine the appropriate dispute mechanism in relation to temporary “disconnection” events;
 - vi) Identify the extent to which the proposal applies to each of the following categories of generators:
 - a) Licensed generators;
 - b) Licensed embedded generators;
 - c) Unlicensed generators;
 - d) Unlicensed embedded generators, but in BSC;
 - e) Interconnector Owners.
 - vii) Consider the impact on the NGC billing systems
 - viii) Identify which parts of the CUSC will need changing (in addition to those in the Amendment proposal).
 - ix) Determine whether there would be any undue discrimination between differing types of generators and other classes of User.
 - x) Consider how Working Group views are fed into the charging forum (which sits under separate governance from CUSC).
 - xi) Consider appropriate timescales for implementation.

The above list is not intended to be exclusive, but reference should be made to paragraph 3 above regarding taking on significant amounts of additional work.

7. During the analysis of CAP048 the Working Group shall consider whether any Alternative Amendment to CAP048 would better facilitate achievement of the Applicable CUSC Objectives in respect of the subject matter of CAP048.
8. The CAP048 Working Group shall also work up draft legal text to give effect to the Proposed Amendment.
9. The Chairman of the CAP048 Working Group is responsible for producing a Working Group Report setting out the recommendations and any Alternative Amendment developed by the Working Group. The Report shall be written with

reference to Clause 8.17 of the CUSC. The Working Group Report (including draft legal text) should be submitted to the Panel Secretary by 12th June 2003 for circulation to Panel Members. In accordance with the CUSC the Chairman, or another member nominated by him, shall present such report to the Amendments Panel at their scheduled meeting on 20th June 2003.

Membership

Chairman – Keith Miller

Nigel Cornwall – Cornwall Consulting
Steve Drummond – EdF Trading
Steve Phillips (or John Capener) - British Energy
Paul Jones – Powergen
Rupert Judson – EDF Energy
Danielle Lane - British Gas Trading
Richard Lavender - National Grid
Simon Lord - First Hydro
David Tolley – Innogy
Barbara Vest – Gaz de France
Richard Ford – Ofgem (Authority Observer)
Emma Groves - Technical Secretary

ANNEX 3 – INDICATIVE DRAFT LEGAL TEXT TO GIVE EFFECT TO AMENDMENT PROPOSAL CAP048

Original Amendment Proposal

The following definitions to be added to Section 11.

“Affected User”

a User:

- a) with **Transmission Entry Capacity** for the **Connection Site** against which the affected **BM Unit** is registered and who is paying or in receipt of generator **Transmission Network Use of System Charges** by reference to such **Transmission Entry Capacity**; or
- b) an **Interconnector Owner**;

“Allowed Interruption”

an **Interruption** as a result of any of the following:

- a) an **Event** other than an **Event** on the **NGC Transmission System**;
 - b) an event of **Force Majeure** pursuant to Paragraph 6.19 of the **CUSC**;
 - c) a **Total Shutdown** or **Partial Shutdown**.
 - d) action taken under the **Fuel Security Code**;
 - e) **Disconnection** or **Deenergisation** by **NGC** under section 5 of the **CUSC**;
 - f) a direction from the **Authority** or the **Secretary of State**;
- or if provided for in a **Bilateral Agreement** with the affected **User**;

“Event”

as defined in the **Grid Code**;

“Interruption”

where solely as a result of the unavailability of the **NGC Transmission System**:

- a) a **BM Unit** of an **Affected User** (other than an **Interconnector Owner**) is **Deenergised**; or
- b) an **Interconnector** of an **Affected User** who is an **Interconnector Owner** is **Deenergised**;

"Interruption Payment"

a sum equal to the loss directly suffered

by the **Affected User** during the **Interruption Period** as a result of the **Relevant Interruption** in respect of the following;

- a) any payment that would have been made by **NGC** to the **Affected User** under any **Ancillary Services Agreement** if the **User** had but for the **Relevant Interruption** been able to provide services during the **Interruption Period**;
- b) any exposure to **System Buy Price**;
- c) the value of the **Bid Offer Acceptance** that **NGC** would have submitted but for the **Relevant Interruption** in respect of the affected **BM Unit**;
- d) the payment the **Affected User** would have received for the **Energy** it would have generated but for the **Relevant Interruption**;

“Interruption Period”

the period of time determined by **NGC** and notified to the **Affected User** by **NGC** commencing with (and including) the **Settlement Period** in which the **Relevant Interruption** first affected the **BM Unit** or **Interconnector** of an **Affected User** and ending on the fourth **Settlement Period** after (but not including) the **Settlement Period** in which **NGC** notifies the **Affected User** that the **Relevant Interruption** has ended;

“Partial Shutdown”

as defined in the **Grid Code**;

“Relevant Interruption”

an **Interruption** other than an **Allowed Interruption**;

“System Buy Price”

as defined in the **Balancing and Settlement Code**;

“Total Shutdown”

as defined in the **Grid Code**;

TEXT

The following shall be added as new paragraphs in Section 5 and the contents page to Section 5 amended accordingly.

“5.10 Relevant Interruptions

5.10.1 In the event of a **Relevant Interruption** where the **Affected User** has not otherwise received compensation under the **Balancing and Settlement Code NGC** shall be liable to pay the **Affected User** upon request the **Interruption Payment** for the **Interruption Period**.

5.10.2 The **Interruption Payment** shall be paid by **NGC** to the **Affected User** within 28 days of the date of agreement as to the amount of the **Interruption Payment**.

5.10.3 The **Affected User** will take all reasonable steps to minimise the effect (and therefore the amount of the **Interruption Payment** sought as a consequence) of the **Relevant Interruption** on the operation of its business”

The first line of Paragraph 6.12.1 of **CUSC** shall be amended by the addition of “5.10.1” after “4.3”.

The first line of Paragraph 6.12.3 of **CUSC** shall be amended by the addition of “5.10.1” after “4.3”.

Alternative A

The following definitions to be added to Section 11.

“Affected User”**a User:**

- a) with **Transmission Entry Capacity** for the **Connection Site** against which the affected **BM Unit** is registered and who is paying or in receipt of generator **Transmission Network Use of System Charges** by reference to such **Transmission Entry Capacity**; or
- b) an **Interconnector Owner**;

“Allowed Interruption”

shall mean an **Interruption** as a result of any of the following:

- a) an **Event** other than an **Event** on the **NGC Transmission System**;
 - b) an event of **Force Majeure** pursuant to Paragraph 6.19 of the **CUSC**;
 - c) a **Total Shutdown** or **Partial Shutdown**;
 - d) action taken under the **Fuel Security Code**;
 - e) **Disconnection** or **Deenergisation** by **NGC** under section 5 of the **CUSC**;
 - f) a direction from the **Authority** or the **Secretary of State**; or
- if provided for in a **Bilateral Agreement** with the affected **User**;

“Event”

as defined in the **Grid Code**;

“Interruption”

where solely as a result of the unavailability of the **NGC Transmission System**:

- a) a **BM Unit** of an **Affected User** (other than an **Interconnector Owner**) is **Deenergised**; or
- b) an **Interconnector** of an **Affected User** who is an **Interconnector Owner** is **Deenergised**;

"Interruption Payment"

for the **Interruption Period** a figure of £[2] (subject to review in accordance with Paragraph 5.10.4) per MW per **Settlement Period** for

- a) in the case of an **Affected User** (other than an **Interconnector Owner**) the MW specified in the **Connection Entry Capacity** for the affected **BM Unit** up to a maximum of the MW specified in the **Transmission Entry Capacity** for the **Connection Site**; and
- b) In the case of an **Affected User** who is an **Interconnector Owner** the MW specified in the **Transmission Entry Capacity** for the **Connection Site**;

“Interruption Period”

The period of time determined by **NGC** and notified to the **Affected User** by **NGC** commencing with (and including) the **Settlement Period** in which the **Relevant Interruption** first affected the **BM Unit** or **Interconnector** of an **Affected User** and ending on the fourth **Settlement Period** after (but not including) the **Settlement Period** in which **NGC** notifies the **Affected User** that the **Relevant Interruption** has ended;

“Partial Shutdown”

As defined in the **Grid Code**;

“Relevant Interruption”

An **Interruption** other than an **Allowed interruption**;

“Total shutdown”

As defined in the **Grid Code**;

TEXT

The following shall be added as new paragraphs in Section 5 and the contents page to Section 5 amended accordingly.

“5.10 Relevant Interruptions

5.10.1 In the event of a **Relevant Interruption** where the **Affected User** has not otherwise received compensation under the **Balancing and Settlement Code NGC** shall be liable to pay the **Affected User** upon request the **Interruption Payment** for the **Interruption Period**.

5.10.2 The **Interruption Payment** shall be paid by **NGC** to the **Affected User** within 28 days of the date of agreement as to the amount of the **Interruption Payment**.

5.10.3 The **Affected User** will take all reasonable steps to minimise the effect (and therefore the amount of the **Interruption Payment** sought as a consequence) of the **Relevant Interruption** on the operation of its business

5.10.4 The **Interruption Payment** specified is at April 2003 and shall be increased or decreased from 1 April each year in line with the **Retail Price Index** on the following basis;

$$\frac{RPI_2 - RPI_1}{RPI_1} \times 100$$

RPI₁

Where

RPI₁ is the Retail Price Index for March 2003

RPI₂ is the Retail Price Index for the March prior to commencement of that 12 month period “

The first line of Paragraph 6.12.1 of **CUSC** shall be amended by the addition of “5.10.1” after “4.3”.

The first line of Paragraph 6.12.3 of **CUSC** shall be amended by the addition of “5.10.1” after “4.3”.

Alternative B

The following definitions to be added to Section 11.

“Affected User”

a **User**:

- a) with **Transmission Entry Capacity** for the **Connection Site** against which the affected **BM Unit** is registered and who is paying or in receipt of generator **Transmission Network Use of System Charges** by reference to such **Transmission Entry Capacity**; or
- b) an **Interconnector Owner**;

“Allowed Interruption”

Shall mean an **Interruption** as a result of any of the following:

- a) an **Event** other than an **Event** on the **NGC Transmission System**;
 - b) an event of **Force Majeure** pursuant to Paragraph 6.19 of the **CUSC**;
 - c) a **Total Shutdown** or **Partial Shutdown**;
 - d) action taken under the **Fuel Security Code**
 - e) **Disconnection** or **Deenergisation** by **NGC** under section 5 of the **CUSC**;
 - f) a direction from the **Authority** or the **Secretary of State**; or
- if provided for in a **Bilateral Agreement** with the affected **User**;

“Event”

As defined in the **Grid Code**;

“Interruption”

Where solely as a result of the unavailability of the **NGC Transmission System**:

- a) a **BM Unit** of an **Affected User** (other than an **Interconnector Owner**) is **Deenergised**.; or
- b) an **Interconnector** of an **Affected User** who is an **Interconnector Owner** is **Deenergised**;

"Interruption Payment"

For the **Interruption Period** a figure of £ per MW per **Settlement Period** calculated by reference to
The higher of A or B below:

- A. the £ per MW figure for the **Affected User** by reference to the total TNUoS income derived from generators plus the sum of all generation connection charges, this sum divided by the total system **Transmission Entry Capacity**, in each case using figures for the **Financial Year** prior to that in which the **Relevant Interruption** occurs, then divided by 17520 (that is the nos of **Settlement Periods** in a year)

Or

- B. the £ per MW figure for the **Affected User** by reference to the tariff in the **Use of System Charging Statement** for the **Financial Year** in which the **Relevant Interruption** occurs plus the £ per MW figure for the **Affected User** derived from dividing the **Affected Users** annual **Connection Charge** by the MW specified in the **Transmission Entry Capacity** for the **Connection Site**, this sum divided by 17520 (that is the nos of **Settlement Periods** in a year)

A or B are then multiplied by;

- a) in the case of an **Affected User** (other than an **Interconnector Owner**) the MW specified in the **Connection Entry Capacity** for the affected **BM Unit** up to a maximum of the MW specified in the **Transmission Entry Capacity** for the **Connection Site**; and
- b) In the case of an **Affected User** who is an **Interconnector Owner** the MW specified in the **Transmission Entry Capacity** for the **Connection Site**;

“Interruption Period”	The period of time determined by NGC and notified to the Affected User by NGC commencing with (and including) the Settlement Period in which the Relevant Interruption first affected the BM Unit or Interconnector of an Affected User and ending on the fourth Settlement Period after (but not including) the Settlement Period in which NGC notifies the Affected User that the Relevant Interruption has ended;
“Partial Shutdown”	As defined in the Grid Code ;
“Relevant Interruption”	An Interruption other than an Allowed Interruption ;
“Total Shutdown”	As defined in the Grid Code ;

TEXT

The following shall be added as new paragraphs in Section 5 and the contents page to section 5 amended accordingly.

“5.10 Relevant Interruptions

5.10.1 In the event of a **Relevant Interruption** where the **Affected User** has not otherwise received compensation under the **Balancing and Settlement Code NGC** shall be liable to pay the **Affected User** upon request the **Interruption Payment** for the **Interruption Period**.

5.10.2 The **Interruption Payment** shall be paid by **NGC** to the **Affected User** within 28 days of the date of agreement as to the amount of the **Interruption Payment**.

5.10.3 The **Affected User** will take all reasonable steps to minimise the effect (and therefore the amount of the **Interruption Payment** sought as a consequence) of the **Relevant Interruption** on the operation of its business.”

The first line of Paragraph 6.12.1 of **CUSC** shall be amended by the addition of “5.10.1” after “4.3”.

The first line of Paragraph 6.12.3 of **CUSC** shall be amended by the addition of “5.10.1” after “4.3”.

Alternative C

The following definitions to be added to Section 11.

“Affected User”	<p>a User:</p> <ul style="list-style-type: none"> a) With Transmission Entry Capacity for the Connection Site against which the affected BM Unit is registered and who is paying or in receipt of generator Transmission Network Use of System Charges by reference to such Transmission Entry Capacity; or b) an Interconnector Owner;
“Allowed Interruption”	<p>Shall mean an Interruption as a result of any of the following:</p> <ul style="list-style-type: none"> a) an Event other than an Event on the NGC Transmission System; b) an event of Force Majeure pursuant to Paragraph 6.19 of the CUSC; c) a Total Shutdown or Partial Shutdown; d) action taken under the Fuel Security Code; e) Disconnection or Deenergisation by NGC under section 5 of the CUSC; f) the result of a direction from the Authority or the Secretary of State; or <p>if provided for in a Bilateral Agreement with the affected User;</p>
“Event”	<p>As defined in the Grid Code;</p>
“Interruption”	<p>Where solely as a result of the unavailability of the NGC Transmission System;</p> <p>a BM Unit of an Affected User (other than an Interconnector Owner) is Deenergised; or</p> <p>an Interconnector of an Affected User who is an Interconnector Owner is Deenergised;</p>
"Interruption Payment"	<p>The payment for each day or part thereof of the Interruption Period calculated as follows:</p> <ul style="list-style-type: none"> 1. In the case of a Relevant Interruption arising as a result of a Planned Outage the higher of:

A. the £ per MW calculated by reference to the total TNUoS income derived from generators divided by the total system **Transmission Entry Capacity**, in each case using figures for the **Financial Year** prior to that in which the **Relevant Interruption** occurs, this is then divided by 365 to give a daily £ per MW rate; or

B. the actual £ per MW of an **Affected User** by reference to the tariff in the **Use of System Charging Statement** for the **Financial Year** in which the **Relevant Interruption** occurs divided by 365 to give a daily £ per MW rate.

A or B are then multiplied by:

in the case of an **Affected User** other than an **Interconnector Owner** the MW arrived at after deducting from the **Transmission Entry Capacity** for the **Connection Site** the sum of the **Connection Entry Capacity** of the unaffected **BM Units** at the **Connection Site**; and

in the case of an **Affected User** who is an **Interconnector Owner** the MW specified in the **Transmission Entry Capacity** for the **Connection Site**.

2. In the case of all other **Relevant Interruptions**:

For the first 24 hours of the **Relevant Interruption**, a sum equal to the price in £/MWh for the relevant **Settlement Period(s)** (as provided for in Section T 1.5.3 of the **Balancing and Settlement Code**).

Multiplied by:

a) in the case of an **Affected User** other than an **Interconnector Owner** the MW arrived at after deducting from the **Transmission Entry Capacity** for the **Connection Site** the sum of the **Connection Entry Capacity** of the unaffected **BM Units** at the **Connection**

Site; and
b) in the case of an **Affected User** who is an **Interconnector Owner** the MW specified in the **Transmission Entry Capacity** for the **Connection Site**

and after the first 24 hours a sum calculated as 1 above.

Provided always that an **Affected User** shall not receive payment for more than one **Relevant Interruption** in any given day;

“Interruption Period”

the period in days commencing with the notification by **NGC** to the **Affected User** of the start of **Relevant Interruption** and ending on the notification by **NGC** the **Affected User** that the **Relevant Interruption** has ended;

“Partial Shutdown”

as defined in the **Grid Code**;

“Planned Outage”

as defined in the **Grid Code**;

“Relevant Interruption”

an **Interruption** other than an **Allowed Interruption**;

“Total Shutdown”

as defined in the **Grid Code**;

TEXT

The following new text shall be added to Section 5 and the contents page to Section 5 amended accordingly.

“5.10 Relevant Interruptions

5.10.1 In the event of a **Relevant Interruption** where the **Affected User** has not otherwise received compensation under the **Balancing and Settlement Code NGC** shall be liable to pay the **Affected User** upon request the **Interruption Payment** for the **Interruption Period**.

5.10.2 The **Interruption Payment** shall be paid by **NGC** to the **Affected User** within 28 days of the date of agreement as to the amount of the **Interruption Payment** .

5.10.3 The **Affected User** will take all reasonable steps to minimise the effect (and therefore the amount of the **Interruption Payment** sought as a consequence) of the **Relevant Interruption** on the operation of its business.”

The first line of Paragraph 6.12.1 of **CUSC** shall be amended by the addition of

“5.10.1” after “4.3”.

The first line of Paragraph 6.12.3 of **CUSC** shall be amended by the addition of “5.10.1” after “4.3”.