



Direct Dial: 020-7901-7308
19 March 2004

National Grid Company, CUSC Signatories and
Other Interested Parties

Your Ref: CAP048
Our Ref: IND/COD/CUSC/CAP048

Dear Colleague,

Amendment to the Connection and Use of System Code (CUSC) - Decision and Direction in relation to Proposed Amendment CAP048: Firm Access and Temporary Physical Disconnection.

The Gas and Electricity Markets Authority (the Authority¹) has carefully considered the issues raised in the Amendment Report² in respect of Proposed Amendment CAP048, Firm Access and Temporary Physical Disconnection.

National Grid Company plc (NGC) recommended to the Authority that Alternative Amendment (C) be approved.

Having carefully considered the Amendment Report and NGC's recommendation and having regard to the Applicable CUSC Objectives and the Authority's wider statutory duties³, the Authority has decided to direct a modification to the CUSC in respect of Alternative Amendment (C).

This letter explains the background to Proposed Amendment CAP048, as set out in the Amendment Report, and sets out the Authority's reasons for its decision. In addition, this letter contains a direction to NGC to modify the CUSC in respect of Alternative Amendment (C).

This letter constitutes the notice by the Authority under section 49A of the Electricity Act 1989 in relation to the direction.

¹ Ofgem is the office of the Authority. The terms "Ofgem" and "the Authority" are used interchangeably in this letter.

² CAP048 Amendment Report dated 26 September 2003.

³ Ofgem's statutory duties are wider than the matters that NGC must take into consideration and include amongst other things social and environmental guidance provided to Ofgem by the government.

Introduction

Proposed Amendment CAP048 aims to establish firm financial rights for generators to use NGC's transmission system by requiring NGC to pay compensation in the event that a generator is temporarily physically disconnected from the transmission system.

Proposed Amendment CAP048 was raised by First Hydro Company on 13 March 2003. The Proposer considered the Proposed Amendment would better facilitate achievement of both of the Applicable CUSC Objectives⁴ as it would provide NGC with an incentive to manage the system more efficiently. The Proposer considered that this would provide NGC with an incentive to more effectively discharge its obligations under the Act and the Transmission Licence and fulfil its obligations to facilitate competition in the generation and supply of electricity.

Background

In December 1999⁵, May 2001⁶ and February 2002⁷, Ofgem considered and consulted on how transmission access and pricing arrangements might be developed towards a structure consistent with the new arrangements in place for the wholesale trading and transmission of electricity⁸. Ofgem proposed that a system of financially firm, tradable access rights should be introduced. Following Ofgem's consultation in February 2002, the CUSC Amendments Panel (the Panel) established the Transmission Access Standing Group (TASG) to provide a forum in which issues associated with transmission access could be examined.

As a result of the work undertaken by the TASG, NGC raised the Approved CUSC Amendment Proposal 043 (CAP043) which introduced two new terms, Connection Entry Capacity (CEC) and Transmission Entry Capacity (TEC). CEC defines the physical capacity of the generator at the connection point⁹ in line with what the connection point has been designed to accept. CEC is defined both on a unit and a station basis so that a connection site can be designed in line with what a generator has contractually requested. TEC defines a generator's maximum allowed export onto the system in a financial year. CAP043 was, therefore, an incremental development on defining the rights of access to the transmission system of participants.

⁴ The Applicable CUSC Objectives are contained in Standard Condition C7F of the licence to transmit electricity treated as granted to NGC under Section 6 of the Electricity Act 1989 (the "Transmission Licence") and are:

- (a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this 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.

⁵ Office of Gas and Electricity Markets, *NGC System Operator Incentives, Transmission Access and Losses Under NETA – A Consultation Document*, December 1999.

⁶ Office of Gas and Electricity Markets, *Transmission Access and Losses under NETA – Consultation Document*, May 2001.

⁷ Office of Gas and Electricity Markets, *Transmission Access and Losses under NETA – Revised Proposals*, February 2002.

⁸ Ofgem was concerned that traded electricity markets under NETA could be distorted by inappropriate transmission arrangements.

⁹ Defined in the Grid Code as "A Grid Supply Point or Grid Entry Point, as the case may be".

Generators rights to use the transmission system are firm to the extent that NGC accepts bids and offers in the Balancing Mechanism to relieve constraints on the transmission system¹⁰. However, in the event that a generator is temporarily physically disconnected from NGC's transmission system, for example as a result of a transmission fault or planned outage, there are currently no arrangements for the generator to be paid compensation.

The CAP048 process

Proposed Amendment CAP048 was submitted for consideration at the Connection and Use of System Code (CUSC) Amendments Panel Meeting on 21 March 2003. At the meeting the Panel determined that a Working Group should be established to consider the Proposed Amendment.

The Working Group submitted its final report for consideration at the Panel Meeting on 25 July 2003. The report noted that the Working Group was unable to reach an agreement as to whether the Proposed Amendment better facilitated the achievement of the applicable CUSC Objectives. The report also outlined three Alternative Amendments formulated by the Working Group during its deliberations but noted that the Working Group was unable to reach a consensus between the Proposed Amendment and any of the Alternatives. The Panel endorsed the Working Group Report and determined that the Proposed Amendment should proceed to wider consultation by NGC.

A consultation paper was issued by NGC on 8 August 2003 with responses invited by 12 September 2003. The final Amendment Report was submitted to the Authority on 26 September 2003. On 18 December 2003, Ofgem issued a GB wide consultation on CAP048. The consultation closed on 15 January 2004.

The Proposed Amendment

Proposed Amendment CAP048 seeks to establish a compensation mechanism whereby NGC compensates a generator for its loss arising from a planned or forced temporary physical disconnection from the transmission system. The compensation would be determined ex-post and would cover the loss of profit from sales of generation, from Balancing Mechanism services, from imbalance exposure and from Balancing Mechanism bids and offers. The compensation would be for the number of settlement periods that a Balancing Mechanism Unit (BMU) is physically disconnected from the transmission system plus the subsequent four settlement periods because of gate closure¹¹. The addition of the four settlement periods is intended to give

¹⁰ Participants who are constrained or have their output increased via the Balancing Mechanism in order to relieve a constraint, receive Bid or Offer prices.

¹¹ Gate closure is one hour (two settlement periods) before delivery time and is the last point at which Parties can notify their contract position to NETA Central Systems and at which Parties can resubmit their Physical Notifications to NGC. The current arrangements for the wholesale trading and transmission of electricity are designed to ensure that there are sufficient incentives on participants to balance their individual trading positions and minimise the costs to NGC as System Operator of balancing the Transmission System. Market participants can contract ahead in the forwards, futures and short-term markets to balance their contract position ahead of Gate Closure.

the generator sufficient time to submit a considered PN. The volume to be compensated would be the total BMU CEC units interrupted, up to a limit of the connection's TEC.

Under the Original Amendment Proposal, a generator would be entitled to claim compensation where the generator:

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

The Original Amendment Proposal would operate to compensate an eligible generator under the following circumstances:

- i. the User is unable to export from a site as a result of inadequate capacity on the NGC system; and
- ii. a whole 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.

The generator would be entitled to claim compensation for the total BMU CEC units interrupted, up to a limit of the connection's TEC, even though it may be able to meet its TEC with other available generating units¹².

Alternative Amendments

The Working Group agreed on the criteria of the Original Amendment Proposal for determining eligibility and the criteria to determine under what circumstances an eligible generator can claim compensation. However, the Working Group did not reach a unanimous decision on the method for determining the level of compensation and so three Alternative Amendments were developed.

Alternative Amendment (A)

This Alternative Amendment Proposal differs from the Original Amendment Proposal in the method used to determine the level of compensation. Under Alternative Amendment (A) compensation would be on an ex ante basis and averaged across all generators for each settlement period. An ex ante estimate is made of average lost profits as a result of disconnection. An eligible generator that suffers an interruption would be paid this estimated

¹² For example: assuming a generator has four BMUs, each with a CEC of 250MW, and a total station CEC of 1000MW, but with a TEC of 500MW. All four 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 disconnects 500MW of generation. The generator would be able to claim its loss for that 500MW of generation, even though it may be able to meet the 500MW shortfall from its remaining two units. Had only two units been operational then the amount of compensation would still be limited to the 500MW TEC but the generator would not have been able to meet the shortfall.

value for each settlement period in which the interruption occurs. The estimate would be determined by the calculation in Appendix 1 and would produce an approximate value of £2/MW/settlement period.

The compensation figure would be directly inserted into the CUSC and would be indexed to the Retail Price Index so that it retained its value in real terms.

As in the Original Amendment Proposal, the volume to be compensated would be the total BMU CEC of units interrupted, up to a limit of the connections TEC and the duration of compensation would be the number of settlement periods that a BMU is physically interrupted plus the four subsequent periods.

Alternative Amendment (B)

The second Alternative Amendment seeks to compensate an eligible generator for TNUoS and connection charges. The level of compensation would be based on the maximum of the sum of average system TNUoS and connection charges or the sum of site TNUoS and connection charges paid on a BMU basis (capped by station TEC). Taking the maximum of these variables allows eligible generators in negative TNUoS charging zones to receive compensation. The actual level of compensation would be determined by the formula in Appendix 1 and would be a £/MW/settlement period value.

The formula would be inserted into 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 into a new year then the values as at 31st March of that year would apply.

Again, as in the Original Amendment Proposal, the volume to be compensated would be the total BMU CEC of units interrupted, up to a limit of the connection's TEC and the duration of compensation would be the number of settlement periods that a BMU is physically interrupted plus the four subsequent periods.

Alternative Amendment (C)

The third Alternative Amendment seeks to differentiate between the level of compensation paid when an eligible generator is notified by NGC of the likely interruption, such as planned outages, and where NGC is unable to provide any notice such as faults on the system. For planned events this Alternative Amendment seeks to compensate an eligible generator for TNUoS charges while for unplanned events an eligible generator would be compensated using the Market Index Price (MIP) as published on the Balancing Mechanism Reporting Service (BMRS) for the first 24 hours of an event or fault. After 24 hours, compensation would be for TNUoS.

The level of compensation for planned events would be based on the maximum of system average TNUoS charges or site TNUoS charges. As in Alternative Amendment (B), this is to enable eligible generators in negative TNUoS charging zones to receive compensation. The level of compensation would be calculated by the formula in Appendix 1 to give a £/MW/day value.

The quantity of generation to be compensated would be determined by deducting the available units' CEC from the station TEC. This differs from the Original Amendment Proposal and the Alternative Amendment Proposals (A) and (B). Where the available units' CEC is greater than or equal to the station TEC no compensation would be payable but where the available units' CEC is less than the station TEC the generator would be eligible for compensation¹³.

Compensation for notified events would be on a daily basis, while for non-notified events the compensation would be for the settlement periods that the BMU was physically interrupted up to 48 settlement periods. This differs from the Original Amendment Proposal and Alternative Amendment Proposals (A) and (B).

Respondents' views

NGC issued a consultation paper on 8 August 2003 inviting responses from CUSC Parties and interested parties. Views were requested by 12 September 2003.

NGC received 12 responses to the consultation in respect of Proposed Amendment CAP048, of which ten respondents supported either the Original Amendment Proposal or one of the alternatives, while two respondents did not support the Amendment Proposal. Of the ten respondents who supported the Amendment Proposal, seven supported the Original Amendment Proposal, none supported Alternative (A) (as a first choice), one supported Alternative (B), and two supported Alternative (C).

The respondents in support of CAP048 considered that the Amendment Proposal would better meet the applicable CUSC objectives. They supported the principle of compensating for any interruption from using the transmission system when firm rights of access have been purchased. A number of these respondents commented that the Amendment Proposal would place an incentive on NGC to manage the transmission system more effectively as NGC would find it in its interests to complete maintenance and rectify faults quickly. However, there were different views on the appropriate method for determining the level of compensation.

Original Amendment Proposal

The respondents in favour of the Original Amendment Proposal supported the principle that the level of compensation should be the party's financial loss as a result of an interruption from using the transmission system. One respondent considered that this approach would preserve the competitive position of generators by ensuring that the generator is not exposed to an unmanageable commercial impact of a transmission fault.

Alternative (A)

¹³ For example if there are four BMUs with CECs of 250MW each and a station TEC of 500MW, if two BMUs were interrupted leaving two available BMUs, no compensation would be payable. However, if three BMUs were prevented from exporting onto the system, compensation would be payable on the 250MW.

A number of respondents that supported the Original Amendment Proposal considered that Alternative Amendment (A) has some merits which include simplicity, greater certainty of outcome and lower administration costs. However, their view was that it is not adequately cost reflective and would result in generators eligible for compensation being under or over compensated in the event of interruption from using the transmission system.

Alternative (B)

The respondent that supported Alternative (B) considered that this solution best reflects the cost of transmission access. However, it was this respondent's view that the proposal is premature and that loss of access needs to be considered in the wider debate on flexible transmission access arrangements.

The respondent that supported Alternative (B) did not support Alternative (C) as he considered that it links a payment within CUSC to a BSC variable which the respondent considers would create an unnecessary inter-dependency between the two codes.

Alternative (C)

The two respondents in favour of Alternative (C) considered that any compensation arrangements should reflect NGC charges and not loss of profits or other consequential losses. It was one of these respondents' view that this alternative also offered a better method for determining the amount of transmission capacity that has actually become unavailable. This respondent considered that the method proposed under the Original Amendment Proposal and Alternatives (A) and (B), is inconsistent with the current definition of TEC on a station basis as opposed to a unit basis. The respondent also considered that it is appropriate to have a form of market related payment (ie the MIP) for the first 24 hours as the incentive would be greater on NGC to resolve those faults. The respondent considered that this recognises that the affected generator may face greater disruption from sudden, unexpected events compared to those where advance notice has been provided.

One respondent considered that the proposal under Alternative Amendment (C) to compensate eligible generators the MIP for the first 24 hours when they have received no notice of the interruption seems arbitrary. Another respondent who favoured the Original Amendment Proposal, viewed the compensation for MIP for the first 24 hours under Alternative Amendment (C) as covering imbalance loss for this period. The respondent did not support this alternative as he considered the compensation to be insufficient to cover the direct loss incurred by the affected generator.

Other views

One respondent did not support the applicable period for which compensation could be claimed spanning the settlement periods in which the disconnection occurred plus a further four settlement periods. The respondent suggested that the relevant period should be limited to the actual time that transmission access was physically unavailable. Two respondents would have preferred to see the duration of the event extended to cover the period from the start of the

disruption until the affected BMU returned to its pre-disturbance FPN which they considered to be more appropriate, especially for plant with a long notice to synchronise.

One of the respondents against the Amendment Proposal considered that none of the alternatives had been developed sufficiently. The respondent also felt that it is wholly inappropriate to consider loss of profit as a basis of compensation and that compensation for costs incurred due to loss of access is more appropriate.

One respondent's view is that a relatively simple approach to cost recovery is required on an interim basis. This respondent envisaged that a reasonable allowance for costs could be made through the incentive scheme without causing undue disruption to the charging arrangements. Two respondents felt that if compensation arrangements for generators are introduced, there should be no additional costs for demand. One respondent considered that NGC is incentivised to provide adequate access provisions and so any interruption event due to their failure should be borne by them. Two respondents considered that compensation for loss of profits may not provide a strong incentive on NGC to restore connection as quickly as possible if NGC is permitted to recover the full cost of compensation from generators, for example, through TNUoS charges.

Two respondents noted that the concept of limited liability has been a fundamental basis of the regulated electricity market. One of these respondents considered that the exposure of NGC to consequential losses is contrary to this concept as well as general legal and commercial principles.

A number of respondents felt that compensation for the demand side should also be considered while some others believed that it is not appropriate to consider the demand side.

The respondents' views are summarised and contained in the Amendment Report in respect of Proposed Amendment CAP048.

NGC's recommendation

NGC recommended to the Authority that CAP048 Alternative Amendment (C) should be approved and implemented from 1 April 2004. NGC does not support the calculation of compensation being based on the generator's lost profits as NGC considers that this would not reflect the costs of providing access.

NGC noted that if the Authority approves CAP048 in any of its formats, NGC would need to discuss with the Authority the funding and incentive arrangements as a consequence of implementing the Proposed Amendment.

GB consultation

Ofgem issued a GB wide consultation on CAP048 on 18 December 2003. Ofgem considers that it is generally appropriate to consult on BSC and CUSC change proposals on a GB wide basis following the Second Reading of the Energy Bill which introduces the British Electricity

Transmission and Trading Arrangements (BETTA).¹⁴ All the responses to the GB consultation have been published on the Ofgem website.

One respondent supported the Amendment Proposal and another considered that further assessment on a GB basis was necessary before a decision on the Amendment Proposal is taken.

One respondent is concerned that there could be a difference in treatment of generators connected at 132kV who are transmission connected in Scotland and distribution connected in England and Wales. The respondent's view was that CAP048 could lead to a difference in treatment of such generators such that a 132kV transmission connected generator in Scotland would be compensated for a temporary disconnection whilst a similar distribution connected generator in England and Wales would not. The respondent considered that this would result in discrimination which would be detrimental to the achievement of the applicable CUSC objective to promote competition.

Another respondent was concerned about the implications of CAP048 on the interactions between the SO and TO in the context of the split-transmission model for BETTA. The respondent noted that it is proposed that users would contract with the GBSO for firm access, but considered that a given failure to deliver this access may, depending on the particular circumstances, be ultimately attributable to either the GBSO or the TO. The respondent considered that as such, when applied to GB, CAP048 would require the introduction of robust provisions in the SO-TO Code to clarify liabilities.

Another view was that it may be necessary to carry out further assessment of the CUSC amendment in a GB context, in order to enable parties to make an informed response and to consider whether their views on the CUSC amendment based on its assessment for England still stand when it is applied to GB. The respondent considered that such GB assessment should be of a comparable level of detail, robustness and transparency as that under England and Wales governance and should be done before implementation on an England and Wales basis otherwise he considered that it may be more appropriate for the Authority to reject the CUSC amendment as drafted, which may allow an alternative to be developed.

Ofgem's view

Ofgem considers CAP048 provides the opportunity to take an incremental step towards transmission access reform and having had regard to its statutory duties, that Alternative Amendment (C) would better facilitate achievement of the Applicable CUSC Objectives compared to the existing CUSC.

Ofgem requested information from NGC, SPTL and SHETL on the compensation that would have been payable in 2002/03 under the Alternative Amendments. Ofgem requested this information to estimate the likely compensation payments to generators, and the potential costs to NGC, of implementing any of the Alternative Amendments. The estimated compensation figures are given in Appendix 2. It was not practicable to produce similar estimates for the Original Amendment Proposal.

¹⁴ The Energy Bill received its second reading on 11 December 2003.

The Original Amendment Proposal and Alternative Amendment (A)

Ofgem considers that the Original Amendment Proposal and the Alternative Amendments would place an incentive on NGC to invest more in the transmission system to avoid faults and carryout necessary maintenance and rectify faults more quickly.

However, Ofgem considers that the Original Amendment Proposal would impose higher costs on users of the transmission system. Both the Original Amendment Proposal and Alternative Amendment (A) could introduce cross-subsidies between users as the compensation for loss of profits may be funded, at least in part, by other users of the transmission system. In addition to the concerns that NGC raised about the effect of the Original Amendment Proposal on its cost of capital and its ability to co-ordinate outages for maintenance purposes, Ofgem considers that the Original Amendment Proposal would remove the incentive for generators to try to minimise their losses in the event of a non-notified interruption by, for example, closing out their contract positions. NGC would not be in a position to minimise these losses to the generator. Ofgem also considers that there is a likelihood of a greater number of disputes under the Original Amendment Proposal.

Ofgem also considers that Alternative Amendment (A) would either over or under compensate generators for their losses and so would not be cost reflective.

Generators may be able to purchase insurance to provide compensation for costs and lost profits associated with transmission interruptions. Individual generators are in a better position to determine the level of cover they require. The compensation arrangements proposed under the Original Amendment Proposal and Alternative Amendment (A) is analogous to NGC providing this insurance, which would be inappropriate and inefficient.

Alternative Amendment (B)

Ofgem considers that it is appropriate for generators to receive compensation for the loss of access rights that they have acquired by paying TNUoS charges. However, Ofgem considers that it would be inappropriate for generators to receive a refund of connection charges which are payments for an asset, as is proposed by Alternative Amendment (B).

Alternative Amendment (C)

Ofgem agrees with the principle of differentiating the amount of compensation to be paid between notified and non-notified interruption events. This is because in general there are additional costs to a generator of being out of balance in the Balancing Mechanism (BM) as a result of a non-notified interruption event. Generators would have to pay System Buy Price which is the MIP at the minimum¹⁵, as a result of Approved BSC Modification P78, when they are short in the BM. The proposed compensation for non-notified events is therefore linked to the costs of being out of balance in the BM. Ofgem considers that compensation for TNUoS charges when a generator has been notified of an interruption and MIP for non-notified

interruptions would provide sufficient incentives on NGC to manage the transmission system more effectively.

Ofgem considers that as generators in negative charging zones also acquire firm access rights it follows that they should be entitled to compensation in the event of an interruption, therefore compensation of average TNUoS charges is an improvement on the current arrangements.

Ofgem sees merit in limiting the compensation applied to situations where a generator has no available units to meet its TEC rather than where a generator is able to claim compensation for being disconnected while still meeting its TEC.

Ofgem considers that allowing compensation for a subsequent four periods after notification has been received from NGC that the transmission system is available, as proposed in the Original Amendment and Alternatives (A) and (B), ignores the (albeit limited) scope for generators to trade out their contract positions. Therefore Ofgem considers that compensation should only be for the periods in which a party is disconnected.

Ofgem also considers that it would be inappropriate for a generator to be able to claim compensation for being disconnected while still meeting its TEC as would be the case under the Original Amendment Proposal and Alternatives (A) and (B).

GB assessment

In accordance with the procedure set out in Ofgem's letter of 5 December 2003 to the CUSC Panel Chairman, Ofgem has carried out a GB consultation on the Proposed Amendment in order to assess the impact that the code change may have on a GB wide basis compared to the impact it would have in England and Wales. Ofgem has therefore considered the likely costs of compensation in Scotland as well as in England and Wales.

The information provided by the Scottish transmission licensees on the likely cost of compensation in Scotland indicates that, consistent with the situation in England and Wales, there are only a very small number of incidents that would be eligible for compensation.

Ofgem has noted the respondents' view that implementation of CAP048 on a GB basis could lead to differing treatment of 132kV connected generators in England and Wales and in Scotland, as generally generators connected at 132kV in England and Wales are distribution connected and those in Scotland are transmission connected. The 132kV network in England and Wales is classified as distribution whilst in Scotland it is classified as transmission. CAP048 addresses the provision of compensation payments to generators connected to the transmission system and does not consider the issue of compensation to generators connected to distribution networks.

Ofgem has also noted the issue of liability for compensation payments post BETTA.

In addition to the assessment that has already been made of the Amendment Proposal on a GB basis, Ofgem/DTI will consult separately on the appropriateness of applying any approved Amendments to the existing CUSC, to the CUSC that will apply GB wide under BETTA. That

consultation will provide an opportunity for respondents to raise any issues that respondents consider appropriate.

Funding Arrangements

Ofgem has had preliminary discussions with NGC about whether the implementation of Alternative Amendment (C) would mean that consequential amendments to funding arrangements would be desirable. Ofgem proposes to shortly issue a statutory licence modification consultation under Section 11(2) of the Electricity Act 1989 concerning what, if any, consequential amendments should be made to funding arrangements as a result of the implementation of Alternative Amendment C.

Conclusion

Ofgem considers that Alternative Amendment (C) would better facilitate achievement of the Applicable CUSC Objectives compared to the Original Amendment Proposal and Alternative Amendments (A) and (B).

Yours sincerely,

A handwritten signature in black ink that reads "A Walker". The signature is written in a cursive, slightly slanted style.

Andrew Walker
Director of Transmission

The Authority's Decision

The Authority has therefore decided to direct that Alternative Amendment (C), as set out in the Amendment Report, should be made and implemented.

Direction under Condition C7F.7(a) of NGC's Transmission Licence

Having regard to the above, the Authority, in accordance with Condition C7F.7(a) of the licence to transmit electricity treated as granted to NGC under Section 6 of the Electricity Act 1989 as amended (the Transmission Licence), hereby directs NGC to modify the CUSC in respect of Alternative Amendment (C), as set out in the Amendment Report.

The modification is to be implemented and take effect from 1 April 2004.

In accordance with Condition C7F.7(b) of NGC's Transmission Licence, NGC shall modify the CUSC in accordance with this direction of the Authority.

If you have any queries in relation to the issues raised in this letter, please feel free to contact Andrew Walker on the above number.

Yours sincerely,



John Neilson

Managing Director, Corporate Affairs

Signed on behalf of the Authority and authorised for that purpose by the Authority

Appendix 1

Formula for compensation under Alternative Amendment (A)

Average annual compensation

$$\begin{aligned} &= \frac{(L * CON) - ((F + B) * VOL) + BM + BS}{TEC} \\ &= \frac{(\pounds 19.6 * 316m) - ((\pounds 13 + 0.65) * 310m) + \pounds 180m + \pounds 60m}{65000MW} \\ &= \pounds 34/kW/Year \end{aligned}$$

Average compensation per settlement period

$$\begin{aligned} &= \frac{\pounds 34/kW * 1000 = \pounds 34,000MW}{17520 \text{ (Number of settlement periods in a year)}} \\ &= \pounds 2MW / \textit{Settlement Period} \text{ (rounded to nearest } \pounds \text{)} \end{aligned}$$

Where:

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 + Bid Volume)(310-2.8 + 8.4) = 316

Formula for compensation under Alternative Amendment (B)

MAX of

$$\frac{\text{Total generation TNUoS} + \text{Total generation Connection Charges}}{\text{Total system TEC} * 17520 \text{ (Number of settlement periods in a year)}}$$

Or

$$\frac{\text{Site TNUoS} + \text{Site Connection Charges}}{\text{Site TEC} * 17520 \text{ (Number of settlement periods in a year)}}$$

This would give a £/MW/Settlement Period Value.

Formula for compensation under Alternative Amendment (C)

MAX of

$$\frac{\text{Total generation TNUoS}}{\text{Total system TEC} * 365}$$

Or

$$\frac{\text{Site TNUoS Charges}}{\text{Site TEC} * 365}$$

This would give a £/MW/day value.

Appendix 2

Estimated compensation costs

NGC

2002/3

There was one eligible incident in 2002/3. Damhead Creek was generating 794MW when it tripped at 14:50 (period 30) on 10 December 2002 due to component failure of a protection device. The unit synchronised again on 11 December 2002 (period 12).

Alternative A - compensation for average generators' lost profit

£47,640

Alternative B - Compensation for TNUoS + Connection charge

£5,240

Alternative C - Differential compensation for planned and unplanned outages

MIP was not introduced until after this incident

2003/4

NGC provided information on the compensation that would have been payable in 2003/04 to illustrate the costs that would have been involved.

Again, there has only been one eligible incident in 2003/4 to date. Dungeness A units, 1,2,3 and 4 were each generating 110MW and Dungeness B unit 21 was generating 140MW when they tripped within two minutes of each other, between 11:00 and 11:01 on 13 December 2003 due to a fault which occurred with a through-floor bushing associated with Dungeness 275kV circuit breaker S10. There was a total loss of 580MW. The fault was isolated at 12:32 which meant the system was available again via the reserve bar sections.

Alternative A - compensation for average generators' lost profit

£5,800

Alternative B - Compensation for TNUoS + Connection charge

£638

Alternative C - Differential compensation for planned and unplanned outages

£76,929

SPTL

2002/3

SPTL were unable to identify any incidents that would have been eligible for compensation over this period.

SHETL

2002/3

There was only one incident that resulted in the disconnection of a transmission connected generator at 132kV and no 275kV incidents. NGC informed Ofgem that there were no planned outages that would appear to involve compensation under CAP048.

SHETL has estimated that under the three scenarios, the compensation would have been as follows:

- A: £240
- B: £20
- C: £1200 (at £20/MWh)