CONCLUSIONS REPORT TO THE AUTHORITY

Modification Proposals to the Gas Transmission Transportation Charging Methodology

NTS GCM 12:

Retrospective Negative TO Entry Commodity Charge & Separate Management of K

21st November 2008

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1 Executive Summary

This document is issued by National Grid in its role as Gas Transporter Licence holder in respect of the NTS ("National Grid").

This document sets out final proposals for amending the Gas Transmission Transportation Charging Methodology (the "Charging Methodology") in respect of the introduction of a Retrospective Negative TO Entry Commodity Charge mechanism (as originally proposed in GCM11) and the separate management of under/over recovery (K) for charging purposes. The mechanism would be used to manage TO entry revenue over recovery in the event that there was a residual over recovery amount after any credits from the buy-back offset mechanism and the TO Entry Commodity rebate mechanism (as introduced through GCM10) had been paid i.e. if TO entry over recovery was entirely due to auction revenue. The separate management of K would apply at all times and would ensure under or over recovery of entry charges would only affect entry charges in the following formula year and under or over recovery of exit charges would only affect exit charges in the following formula year.

This proposal represents a variation to the GCM11 proposal which was vetoed by the Authority (8th February 2008) on the grounds that it was non-symmetric in its treatment of over and under recovery for entry and exit which might lead to a cross subsidy of Entry Users by Exit Users. This proposal (GCM12) seeks to overcome the reasons for the rejection of GCM11 by the addition of the separate management of K which would remove the risk of Exit Users cross subsidising Entry Users.

The prevailing TO over recovery process involves the buy-back offset and the TO Entry Commodity rebate mechanisms. The buy-back offset mechanism leads to a credit being paid to all Users based on their firm capacity holdings to offset NTS Entry Capacity buy-back costs. NTS Entry Capacity buy-back costs represent a cost to Users via the Entry Capacity Neutrality charge. Revisions to this mechanism to increase its efficiency were introduced through Charging Proposal NTS GCM 09, however, in the event that buy-back costs are less than the over recovery amount, this mechanism will not redistribute the full over recovery amount. As a consequence, National Grid raised Charging Proposal NTS GCM 10, which introduced the TO Entry Commodity charge rebate mechanism.

This proposal, GCM12, would introduce a retrospective negative TO Entry Commodity charge which would allow redistribution of over recovery in excess of that managed through the prevailing TO over recovery processes. This should allow for any TO Entry revenue over recovery amount to be managed.

GCM12: National Grid proposes that:

Trigger

- The Retrospective Negative TO Entry Commodity charge (credit) would be used if there remained a residual over recovery amount after taking into account any revenue redistributed via the Entry Capacity buy-back offset TO over recovery mechanism (as revised through GCM09) and the TO Entry Commodity Rebate Mechanism (as described in GCM10)
    - The TO Entry Commodity rebate (GCM10) mechanism would be triggered if there remained a residual over recovery amount after taking into account any revenue redistributed by the buy back offset mechanism (as described in GCM09)
- The mechanism would be triggered, in the event of TO over recovery, even if the buy back offset mechanism (GCM09) or the TO Entry Commodity Rebate Mechanism (GCM10) had not been used (i.e. had not been triggered or had not resulted in a rebate being paid)
- The mechanism would be triggered at the end of the formula year based on the outcome of all NTS Entry Capacity auctions that represented a TO revenue stream.

Mechanism

- Any residual revenue remaining after taking into account credits resulting from the Entry Capacity buy-back offset (GCM09) and the TO Entry Commodity Rebate (GCM10) mechanisms would be available as a credit to shippers.
- Credits would only be paid based on relevant entry allocations i.e. those allocations that would attract the TO Entry Commodity charge.
- Credits would only be paid if the residual over recovery was in excess of £1m (this equates to the minimum TO Entry Commodity price of 0.0001 p/kWh)
- Each Shipper's credit would be calculated as a proportion of the total available credits based on the ratio of that Shipper's SO Entry Commodity charges to the aggregate of all SO Entry Commodity charges paid over the formula year e.g. if the value of the credits paid through the proposed mechanism represented 5% of all SO Entry Commodity charges paid then each Shipper would receive a credit representing 5% of the SO Entry Commodity charges that it had paid over the formula year. For the avoidance of doubt, this calculation excludes optional ("short-haul") entry commodity charges. The credit would be treated as TO for regulatory reporting.
- Credits would be paid following the end of the formula year. Note that NTS Entry Commodity charges for the last month of the formula year (March) are invoiced in the following May.

Treatment of K

- The Licence defined TOKt ('K') term would be split into separate Entry and Exit K components for the purposes of setting charges
- The applicable interest rate used to calculate K within the Licence depends on whether there has been over or under recovery. The rules used to calculate the entry and exit specific K components, which ensure that the sum of the two components equals the Licence K calculation, are laid out in appendix B. Examples of how these rules would be applied are laid out in appendix C.

Implementation

It is proposed that these arrangements are implemented with effect from 1st April 2009 for the 2009/10 formula year.

Future Proposals

This proposal represents the final step in addressing TO Entry over recovery following on from GCM09 and GCM10. National Grid anticipate that further TO Entry over recovery proposals might only be required should this proposal be vetoed or in response to further changes to the UNC.

2 Introduction

2.1 The prevailing TO revenue over recovery mechanism is in two parts.

2.2 Firstly, subject to implied revenue indicating that the Licence defined revenue over recovery limits[1] would otherwise be breached, the buy-back offset mechanism leads to a credit being paid to all Users based on their Monthly System Entry Capacity (MSEC) holdings to offset NTS Entry Capacity buy-back costs. NTS Entry Capacity buy-back costs represent a cost to Users via the Entry Capacity Neutrality charge. Revisions to this mechanism to increase its efficiency have been introduced through Charging Proposal NTS GCM 09, however, in the event that buy-back costs are less than the over recovery amount, this mechanism does not redistribute the full over recovery amount.

2.3 Secondly, subject to implied revenue indicating that over recovery would otherwise be in excess of £1m, rebates are paid based on the TO Commodity Charge.

2.4 If there were no TO entry commodity charges to rebate or the over recovery amount was in excess of the TO entry commodity charges paid then the residual over recovery would be entirely due to auction revenue and there would be no further mechanism to manage this scenario.

2.5 GCM11 was raised to manage exactly this scenario however, the GCM11 proposal was vetoed by the Authority (8th February 2008) on the grounds that it was non-symmetric in its treatment of over and under recovery for entry and exit Users and as a consequence it might lead to a cross subsidy of Entry Users by Exit Users.

3 Background

3.1 Entry and Exit TO revenues are managed separately in that TO charges are set such that 50% of TO allowed revenue, other than that revenue collected through the DN Pensions charge and Metering at NTS directly connected sites, is collected from Entry and 50% from Exit.

3.2 TO Exit Capacity charges are based on administered prices which are designed to collect all TO Exit allowed revenue.

3.3 TO Entry Capacity charges are based on auctions and any forecast under recovery is managed by setting the TO Entry commodity charge.

3.4 The TO Entry Commodity charge cannot currently be used as an over recovery mechanism for Entry over recovery and hence the TO Entry Commodity price cannot be set to have a negative value.

[1] The Licence places restrictions on National Grid should TO over recovery represent 4% in one year or 6% over two years.

4 Discussion and Issues

Issues Regarding the Prevailing TO Over Recovery Mechanism

4.1 There remains a risk that the two TO Entry revenue over recovery mechanisms will not redistribute the full over recovery amount. This scenario would occur if over recovery was entirely due to entry auction revenue. (i.e. If there were no TO entry commodity charges to rebate or the over recovery amount was in excess of the TO entry commodity charges paid) In this scenario, excess revenue would flow into the 'K' mechanism. Excess revenue from one formula period results in reduced allowed revenue in the following formula period. This may lead to excess revenue collected from Entry Users being effectively redistributed on a fifty-fifty basis between Entry and Exit Users in the following formula period.

4.2 The risk of this over recovery scenario remains and this could be over come by allowing the TO Entry Commodity charge to be negative.

TO Entry Commodity Charge Issues

4.3 Proposals have been raised in the past to introduce a negative TO Entry Commodity charge to manage over recovery

- firstly to compliment the buy-back offset mechanism,
- secondly as a primary over recovery mechanism, and
- finally as a retrospective mechanism (GCM11)

4.4 All three proposals were vetoed by the Authority. The history of revenue over recovery mechanism charging proposals is outlined in appendix A.

4.5 The difficulty with a negative TO entry commodity charge in combination with the TO entry buy-back offset mechanism is that both buy-back costs and over recovery revenue must be forecast to set the commodity rate and this is far from a simple or transparent process. This appears to have been the key to the Authority's rejection of previous proposals.

4.6 Even if appropriate forecasting processes could be defined, there remains the scenario that over recovery is triggered at a time that does not allow a negative commodity rate to be set within the formula year given the charge notice requirements within the Licence and the UNC. These issues could be addressed by applying the charge retrospectively as proposed through GCM11.

Retrospective TO Entry Commodity Charge

4.7 A retrospective negative TO Entry Commodity charge would allow over recovery to be managed without needing to forecast entry revenue or buy-back costs.

4.8 Concerns have been expressed that a negative commodity charge may affect Shipper incentives to flow gas. Shippers are however exposed to the net SO and TO Entry Commodity charge and hence there would be no change in the incentive properties of the net NTS Commodity charge (SO plus TO) if the TO component were to be negative unless this resulted in the net commodity charge being negative.

4.9 Shippers can already calculate the approximate impact on their net entry commodity charge of the cost of any entry capacity they purchase and this would not change should the TO component be negative. Every £1M spent on entry capacity will result in a 0.0001 p/kWh reduction in the TO Entry Commodity charge over a 12 month period. There should therefore be no change in capacity bidding behaviour as a result of this proposal.

Mechanism Trigger

4.10 The GCM11 over recovery management process would have operated at the end of the formula year based on the outcome of all auctions representing a TO revenue stream, TO Entry commodity revenue and any credits paid as a result of the buy-back offset mechanism and the TO Entry Commodity Rebate mechanism (as introduced through the implementation of NTS GCM10).

Mechanism

4.11 The GCM11 proposal would have represented retrospectively setting the TO Entry Commodity rate to a negative value. Credits might therefore only be paid if the residual over recovery was in excess of £1M as this equates to the minimum negative TO Entry Commodity price of -0.0001 p/kWh. This same approach has been included within the charging methodology as a result of the implementation of the TO Entry Commodity rebate mechanism (as introduced through the implementation of NTS GCM10).

4.12 Credits would also have been capped at the level of the SO Entry Commodity charge level such that the combined impact of SO and TO Entry Commodity charges did not represent a credit to Shippers.

Veto of GCM11 – Separate K Management for Entry & Exit

4.13 GCM11 was vetoed by the Authority on the grounds that it was non-symmetric in its treatment of over and under recovery for entry and exit. Other than the £1m threshold, GCM11 would have removed the risk of TO Entry over recovery which would have prevented revenue flows from Entry to Exit however there remains the risk of revenue flows from exit to entry if exit revenue represented over recovery and entry represented under recovery. The asymmetry of this risk might lead to a cross subsidy of Entry Users by Exit Users and hence was deemed to be discriminatory.

4.14 This proposal (GCM12) seeks to overcome the reasons for the rejection of GCM11 by the addition of the separate management of K which would remove the risk of Exit Users cross subsidising Entry Users as entry over or under recovery would only affect entry users in the following year and exit over or under recovery would only affect exit users in the following year.

4.15 As a higher interest rate applies to over recovery compared to under recovery this would have to be taken account of if there were a net over recovery but either entry or exit represented an under recovery. The calculation of entry and exit K components would need to ensure that the sum of the two equalled the Licence K figure.

4.16 In such an over recovery scenario, the higher interest rate would be applied to calculate K, the lower interest rate would be used to calculate the K component that had under recovered and the other K component would be calculated as the difference between the two. In this way, the entry K component plus the exit K component would equal the Licence K component. Examples are shown in appendix C.

Implementation

4.17 The outcome of the 2008 AMSEC auction implies a requirement to set a TO Entry Commodity rate of 0.0094 p/kWh and that over recovery would need to be in excess of approximately £90m plus buy-back costs before the prevailing entry over recovery management mechanisms would be insufficient for formula year 2008/9. This forecast, however, assumes that revenues from the RMTTSEC auctions (as introduced via UNC Modification proposal 0187A) would be similar to those received from the one-off 2007 TTSEC auction (as introduced via UNC Modification proposal 0169A). This may not be the case.

4.18 Based on the support for GCM11 it would seem prudent to raise a further variant of this proposal to ensure a holistic over recovery mechanism for TO entry revenue. System functionality for GCM10 and GCM11 has already been implemented as part of the summer 2008 release of Gemini. The cost and risk associated with removing the GCM11 functionality was investigated on the veto of GCM11 however the economic and efficient solution was to leave the functionality within the release as unused functionality. As a consequence there would be no implementation costs associated with the implementation of the proposal covered by this document as the K management aspects also incur no system costs.

5 Terms of the Original Proposal

5.1 National Grid proposed that:

K Management

- The Licence defined TOK_t ('K') term would be split into separate Entry and Exit K components for the purposes of setting charges
- The applicable interest rate used to calculate K within the Licence depends on whether there has been over or under recovery. The rules used to calculate the entry and exit specific K components, which ensure that the sum of the two components equals the Licence K calculation, are laid out in appendix B. Examples of how these rules would be applied are laid out in appendix C.

Trigger

- The Retrospective Negative TO Entry Commodity charge would be used if there remained a residual over recovery amount after taking into account any revenue redistributed via the TO Entry Commodity Rebate Mechanism (as described in GCM10)
    - The TO Entry Commodity rebate (GCM10) mechanism would be triggered if there remained a residual over recovery amount after taking into account any revenue redistributed by the buy back offset mechanism (as described in GCM09)
- The mechanism would be triggered, in the event of TO over recovery, even if the buy back offset mechanism (GCM09) or the TO Entry Commodity Rebate Mechanism (GCM10) had not been triggered
- The mechanism would be triggered at the end of the formula year based on the outcome of all NTS Entry Capacity auctions that represented a TO revenue stream.

Mechanism

- Any residual TO entry revenue remaining after taking into account credits resulting from the Entry Capacity buy-back offset (GCM09) and the TO Entry Commodity Rebate (GCM10) mechanisms would be available as a credit to shippers .
    - As specified by GCM09, any residual over recovery at the end of the formula year would first be used to offset buy backs costs in those months within the formula period when buy-back costs had occurred and no credit had been paid or where the credit was less than the buy-back cost.
    - As specified by GCM10, any residual over recovery at the end of the formula year would secondly be used to rebate TO Entry Commodity charges paid within the formula period.
- Credits would only be paid based on relevant entry allocations i.e. those allocations that would attract the TO Entry Commodity charge.
- Each Shipper's credit would be calculated as a proportion of the total available credits from the ratio of Shipper relevant entry allocations to total relevant entry allocations over the formula year.

- Credits would only be paid if the residual over recovery was in excess of £1m (this equates to the minimum TO Entry Commodity price of -0.0001 p/kWh)
- Credits would be capped at the level of the SO Entry Commodity charge such that the combined impact of SO and TO Entry Commodity charges did not represent a credit to Shippers.
- Credits would be paid following the end of the formula year based on relevant entry allocations i.e. those allocations that would attract the TO Entry Commodity charge

Implementation

It is proposed that these arrangements are implemented with effect for the 2009/10 formula year and hence from 1st April 2009.

Future Proposals

This proposal represents the final step in addressing TO Entry over recovery following on from GCM09 and GCM10. National Grid anticipate that further proposals might only be required should GCM12 be vetoed or in response to further changes to the UNC.

6 Representations Made

National Grid NTS received 11 responses to its consultation on NTS GCM 12; 8 were in support, a further 2 offered support for the K management component, with no comment on the remainder of the proposal and 1 was not in support of the proposal but offered support for the K management component. None of the responses were marked as confidential, and copies of the responses have been posted on the Gas Charging section of the National Grid information website.[2]

Support for the Proposal

Respondent	Abbr.	View
British Gas Trading	BGT	Do Not Support
ConocoPhillips (U.K.) Limited	COP	Support
E.ON UK plc	EON	Support
EDF Energy plc.	EDF	Support
National Grid Gas Distribution	NGD	Partial Support
Petgas Trading (UK) Ltd	PTG	Support
RWE npower	RWE	Support
Scotia Gas Networks	SGN	Partial Support
Scottish and Southern Energy plc	SSE	Support
Scottish Power	SP	Support
Statoil (UK) Ltd	STUK	Support

Summary of Responses by Consultation Question

Mechanism

Respondents Views

BGT "is not in full agreement with how the negative TO Entry Commodity Charge credit would be applied, in particular that *only* those entry allocations that would attract the TO Entry Commodity charge would attract the credit. BGT also feels that the credit amounts should be subject to interest and perhaps other mechanisms for applying the credit should be explored."

BGT comments "It would be useful for GCM12 credit levels to be monitored so that potential interest amounts could be logged, reported and effectively dealt with at the next Price Control Review. "

BGT comments "In order for the credit amounts to be returned on a consistent and fair basis, revenue over recovery credits could use another mechanism. Credits could be

[2] GCM12 consultation responses can be found at ;

http://www.nationalgrid.com/uk/Gas/Charges/consultations/

applied on a price weighted entry capacity allocation basis by entry terminal. For instance, if a party contributed x% of total terminal entry capacity revenue in the over-recovery period then it should receive x% of the rebate. After GCM09 and GCM10 are applied, and residual over recovery would be due to entry capacity revenue and hence should be returned proportionately."

COP "reiterate our support for the elements of the proposal carried forward from GCM11, namely the proposed trigger mechanism and the proposed mechanism for managing any residual TO entry revenue, as set out in our letter dated 5 December. We are also content with the revised implementation date."

PTG "supports the principle of GCM12 to distribute any residual over recovery amount to the TO entry revenue after taking into account any revenue redistributed by the mechanisms introduced via GCM 09 and GCM 10. Our understanding is that distribution would be paid based on relevant entry allocations attracting the TO Entry Commodity charge and that the proposed treatment of the K components ensures that there is no potential for Exit Users cross subsidising Entry Users."

SP "have concerns over the application of any retrospective charge, and particularly any over-recovery mechanism which is rigidly ring-fenced so that it affects what people are willing to pay at the initial allocation stage. However, we believe that this is an acceptable approach in this situation – retrospective in the light of all capacity holding payments in the previous period and pertaining to those with entry flows in that period. There could be a perverse incentive to pay up for and hoard capacity if it were levied only holders of capacity in that period."

STUK "is in support of this proposal, and agrees that the implementation of this charging modification would mitigate the risk of residual over recovery amounts not being fully redistributed".

National Grid's View

National Grid continues to believe that the current methodology needs to be modified in order to ensure that, in the relevant circumstances, more excess revenue is returned to holders of NTS Entry Capacity than would currently occur. National Grid believes that this proposal represents an improvement to the existing Charging Methodology as it ensures that excess revenue from NTS capacity auctions should as far as possible be 'ring-fenced' to NTS Entry charges, without influencing future capacity bidding behaviour. National Grid agrees that in regard to the rebate "There could be a perverse incentive to pay up for and hoard capacity if it were levied only holders of capacity in that period". The proposed mechanism ensures consistent commoditisation of over and under recovery and hence should not influence bidding behaviour.

Mechanism – Short-haul

Respondents' Views

BGT comments "It is our understanding that the Optional Commodity charge serves as an alternative to both the entry/exit NTS SO Commodity charge *and* the NTS TO Commodity charge. It is also the case that those entry points that use this tariff can and do contribute to TO revenue over recovery. To exclude the Optional Commodity entry flows from the credit would be discriminatory and hinder effective competition between gas suppliers.

For example, if the TO Entry Commodity charge is zero and there are no buybacks, yet there is a revenue over recovery, the GCM12 methodology could still apply. Under

this scenario those sites that use the Optional Commodity charge have contributed to the revenue over recovery as these sites have booked and paid for entry capacity. It is clearly discriminatory not to include these site entry flows in the credit allowance as they have contributed to the entry revenue over recovery. Simply because these sites normally do not pay the TO Entry Commodity charge is not a good enough justification to exclude these entry flows from the credit.

The same holds true even if the TO Entry Commodity charge is positive and there is a revenue over recovery. After applying GCM09, those parties who pay the TO Entry Commodity charge would receive a rebate under GCM10 if there remained a residual over recovery. If there is still a residual over recovery after GCM10 is applied, GCM12 would be applicable (if residual over recovery is over £1m). At this point the entry flows from the Optional Commodity charge sites have contributed to the revenue over recovery for the reason described above. Hence, even when the TO Entry Commodity charge is positive, the entry flows from the Optional Commodity charge sites could have contributed to a revenue over recovery through their TO entry capacity payments. "

National Grid's View

National Grid believes that it is not appropriate for flows that avoid under-recovery charges (e.g. short-haul avoids the TO Entry Commodity charge) to benefit from over recovery payments as this would be discriminatory. If those flows which currently avoid the TO Entry Commodity charge (Storage and Short-haul) were to attract the TO Entry Commodity charge in the future then they would receive a credit under the GCM12 proposed mechanism. National Grid believes that the appropriateness of short-haul flows being included within both the under and over recovery mechanisms is worthy of review but should be dealt with as part of a review of short haul charges and not as part of this proposal.

Mechanism – Retrospective Charge

Respondents' Views

EDF "supports the targeting of costs at those who have caused them to be incurred on the Transportation System. We remain to be convinced that the current 50/50 split between entry and exit remains appropriate, however we recognise that this is out of the scope of this consultation. If the 50/50 split is appropriate, then we believe that any arrangement that ensures there are no cross subsidies between sectors is appropriate. However EDF Energy remains concerned with the application of any retrospective charges."

EDF " recognises that this proposal would introduce retrospective decreases in charges, which would be beneficial to Shippers. However we remain concerned that this would not be symmetrical with Shippers benefiting from immediate decreases and exposing NGG with cash flow shortfalls when revenue was below target. EDF Energy therefore believes that it is equitable to delay decreases in charges to maintain the predictability and stability that is important for Shippers when facing a charge increase. We are therefore opposed to the retrospective element of this proposal; however we believe that the targeting of K to entry and exit represents an improvement to the current arrangements, and so as a whole we support this proposal."

National Grid's View

GCM12 proposes a rebate, i.e. a credit to Shippers, and therefore does not represent a charge being levied i.e. requiring shippers to pay. Having considered the notice requirements within the Licence, National Grid believes that charges could not be set retrospectively but that rebates could be set retrospectively. Rebates were introduced via PC65 and the principle of continuing to provide rebates without explicit notice through the entry capacity buy-back offset mechanism has been supported by the implementation of GCM09. National Grid recognises the risk to shippers that the introduction of retrospective charging would create and hence has no intention of proposing retrospective charging. National Grid believes that the application of entry capacity reserve prices and the ability to manage under recovery through the TO entry commodity charge provide sufficient under recovery management tools which would be entirely consistent with the prevailing and proposed under recovery tools.

Mechanism - Interest

Respondents' Views

BGT "would also like to question why interest is not paid or applicable on the over recovery amount that is to be credited back via GCM12. Any over recovery which goes into K is subject to interest yet the credit via GCM12 is not. Both amounts are calculated after the end of the formula year and both amounts (in this argument) represent revenue over recovery. If for example, the residual revenue over recovery is £990K after GCM09 and GCM10, this amount would go into K and be subject to interest. If however, the residual over recovery amount is £1.01m this amount would be credited via GCM12 and not be subject to interest payments. BGT fails to see the distinction between these two over recovery amounts in the examples and why only one of them should attract an interest payment. BGT would ask that NG provide a clear explanation as to why the over recovery amount applicable under GCM12 does not attract an interest payment, especially when comparing it to K. "

National Grid's View

GCM12 proposes that revenue is redistributed at the end of the formula year and hence no interest would apply whereas the K mechanism redistributes revenue over the twelve month period following the formula year and interest would apply. TO revenue over recovery may not actually occur until the March of a formula year although National Grid may make over recovery payments through the GCM09 entry capacity buy-back offset mechanism before that date if there were implied over-recovery (i.e. based on revenue due but not collected). Given that the over recovery credits proposed through GCM12 would be linked to the March Entry Commodity invoice, which is issued in the following May, National Grid may at no point in the formula year have received more than its TO allowed revenue were the GCM12 proposal to be implemented. There is also no mechanism within the licence to cater for within formula year interest. The introduction of such a mechanism to manage credits or charges would be anticipated to add significant complexity to cater for an extremely unlikely scenario based on experience from recent formula years.

Trigger

Respondents' Views

BGT "believes that in the event of excess revenue over recovery, there needs to be a mechanism to return the revenue to the relevant holders of entry capacity in a fair and transparent manner. In addition, if there remains a revenue over recovery that cannot be returned due to it not meeting particular trigger mechanisms, then the 'K' should be applied so as to avoid any cross subsidisation and asymmetry. "

EDF "would note that there appears to be an inconsistency in the methodology where NGG note that GCM12 would only be triggered after GCM09 and GCM10, but then note that GCM12 could be triggered even if GCM09 and GCM10 were not utilised. It is EDF Energy's understanding that GCM09 and GCM10 could be triggered by an over recovery, but due to a lack of buy backs or TO Commodity Charges these would not be utilised. We believe that it would be beneficial were further clarity provided on this issue within the "Trigger" guidelines. In addition we would note that NGG refers to the splitting of Licence Defined Term TOKt (K). Again it is our understanding that this split would only occur in the charging methodology and this proposal would not require the redefinition of this Licence Defined Term."

National Grid's View

The buy-back offset mechanism (GCM09) would be considered first in the event of over recovery. If this mechanism was not triggered due to the size of over recovery or if it were triggered and the full revenue could not be redistributed due to the level of buy-back costs then the TO entry commodity rebate mechanism (GCM10) would next be considered. If this mechanism was triggered then any residual revenue remaining after the TO Entry commodity rebate (GCM10) had been paid would be redistributed by the proposed GCM12 mechanism subject to this being greater than the £1m threshold. EDF's understanding of the sequence in which the mechanisms could be used is correct. The wording of the GCM12 proposal sought to make it clear that National Grid would have no discretion to use GCM12 before the potential to redistribute revenue through GCM09 and GCM10 had been exhausted.

Separate K Management for Entry & Exit

Respondents' Views

BGT "supports the proposal for the separation of the TOKt licence term (K) between entry and exit. This will avoid the problem of asymmetry and cross subsidisation. BGT is also in agreement with Appendix B in terms of how the different interest rates are applied to the over or under recovery amounts, so as to ensure the sum of the two parts equals the Licence K calculation. "

COP "notes that the proposal represents a variation to the GCM11 proposal, which COP supported, which was vetoed by the Authority on the grounds that it was non-symmetric in its treatment of over and under recovery for entry and exit which might lead to a cross subsidy of entry users by exit users. The difference in the new proposal is the introduction of a mechanism to separate management of the under/over-recovery term K and the movement of the implementation date from 31 March 2008 to 1 April 2009 for the 2009-10 formula year."

COP "support the proposal to split the K term into separate entry and exit components and the rules that will ensure that the sum of the two components will equal the licence K calculation. This should remove the risk of exit users cross-subsidising entry users."

EON comments " It also seems sensible that where there is entry or exit over or under recovery, that the calculation of 'K' is then split (for charging purposes only) between entry and exit to avoid the potential for cross-subsidisation."

EDF "note that under the current arrangements for the management of K there is an opportunity over multi year periods for exit Users to cross subsidise entry Users, or vice versa. This would not appear to be cost reflective and would not be beneficial to competition. Targeting of K to entry and exit would ensure that the general principle of a 50/50 split of core revenue is maintained and so remove the chances of a cross subsidy. As a preference we believe that this should have been developed as a single proposal without retrospective charges."

EDF " is opposed to any and all retrospective charges, as we believe that this is detrimental to competition and could result in an increased risk premium to consumers. However we are supportive of the separate management of K within the charging methodology, as we believe that this promotes competition and reduces the likelihood of cross subsidies between market sectors. We therefore support this proposal overall, but believe the best solution would be only to introduce changes to allow the separate management of K."

RWE "support the proposals put forward in GCM12. The introduction of a mechanism to manage separately entry K and exit K appropriately addresses Ofgem's concern about non-symmetric treatment of over and under recovery. "

"As a DN, SGN is not concerned with the mechanisms for managing entry over-recovery, but is concerned that exit users should not be disadvantaged." SGN "supports this proposal on the basis that it will prevent any cross-subsidy of Entry users by Exit users. SGN considers that rules proposed to divide the total TOKt into entry and exit components are appropriate."

National Grid's View

National Grid welcomes support for this aspect of the proposal and believes that it overcomes the concerns expressed regarding the previous GCM11 entry over recovery proposal as it avoids any potential cross subsidy issues.

Summary of Responses by Relevant Objectives

SP "believe that proposed changes to National Grid's Transmission Transportation Charging Methodology meet the relevant GT Licence objectives, with separate Entry and Exit K components for charge setting, and a methodology which ensures that the sum of the two equals the K calculation."

Reflect the Cost Incurred by the Licensee

Respondents' Views

EON "believe it is important that all over-recovered amounts are re-distributed within the same formula year and that we avoid, wherever possible, amounts flowing into the 'K' calculation for the next formula year. We support the introduction of a retrospective negative TO Entry Commodity Charge, which will allow for residual TO Entry revenue over-recovery amount to be managed better."

"SSE believes the proposal contained in GCM12 satisfies the relevant methodology objectives as:"…"In improving the efficiency of the TO Entry Commodity process, the likelihood of over recovery is reduced and hence the aggregate of all entry and exit charges would more closely reflect the costs incurred within the formula year."

Take Account of Developments in the Transportation Business

Respondents' Views

"SSE believes the proposal contained in GCM12 satisfies the relevant methodology objectives as:"…"The proposal modifies the TO Over recovery mechanism to take into account past and potential future changes to the NTS Entry Capacity regime and hence "takes into account developments in the transportation business". This proposal is consistent with enduring entry trade and transfer arrangements and with the potential for more variable exit revenue, which may be a consequence of exit reform."

SP comments "Since PC73 and the separation of Entry & Exit in commodity as well as capacity charging, we believe that separate management of k for Entry and Exit has been appropriate. This is particularly true with the advent of auctions at Exit and the uncertainty surrounding Entry arrangements like substitution and trades & transfers. We expect potential for over-recovery – or certainly greater volatility – in both entry and exit revenues."

Facilitate Effective Competition

Respondents' Views

EON comments "On a general note, it is apparent that with the increasing prevalence of auctions in the capacity regime that ever more complex charging proposals are needed to resolve some of the unforeseen or unintended consequences we are now seeing. Unfortunately, the complexity of the charging arrangements makes it very difficult for Users to understand how National Grid is performing in relation to its allowed revenue and its incentive regime (for both Entry and Exit), which is key in terms of predicting future price changes. As a result, we would encourage National Grid NTS to provide more detailed information and commentary (similar to that provided by DNs under UNC Modification Proposal 186) to support Users in this regard."

"As a general principle EDF Energy believes that any charging methodology should aim to introduce charges that are predictable and stable. This is important for Shippers in order to forecast their costs and develop retail tariffs. The cost of changing a retail tariff is significant, running into millions of pounds, and so Shippers are unable to quickly alter tariffs in response to unexpected changes in Transportation Charges. Unexpected charges could therefore have a detrimental impact on competition by creating a barrier to entry. We have supported the current notification requirement for charges to avoid this issue."

NGD "support the proposal to split the treatment of TO over/under-recovery into separate entry and exit components for the purposes of setting charges and the proposed method of splitting interest charges on K. The proposal should lead to the target level for exit charge setting being fully independent of the level of under- or over-recover on TO entry and so should lead to more stable exit charge levels. We consider that more stable exit charge levels will better facilitate effective competition between gas shippers and between gas suppliers."

"SSE believes the proposal contained in GCM12 satisfies the relevant methodology objectives as:"…"GCM12 should prevent cross subsidies between entry and exit Users and hence should facilitate effective competition between gas shippers and between gas suppliers through more stable and transparent charges."

7 Changes to the Original Proposal in Light of Representations Made

7.1 The following clarifications are made in light of responses and questions raised throughout the process.

Clarification Regarding Mechanism Sequence

7.2 In its response, EDF commented that "there appears to be an inconsistency in the methodology where NGG note that GCM12 would only be triggered after GCM09 and GCM10, but then note that GCM12 could be triggered even if GCM09 and GCM10 were not utilised. It is EDF Energy's understanding that GCM09 and GCM10 could be triggered by an over recovery, but due to a lack of buy backs or TO Commodity Charges these would not be utilised. We believe that it would be beneficial were further clarity provided on this issue within the "Trigger" guidelines."

7.3 The buy-back offset mechanism (GCM09) would be considered first in the event of over recovery. If this mechanism was not triggered due to the size of over recovery or if it were triggered and the full revenue could not be redistributed due to the level of buy-back costs then the TO entry commodity rebate mechanism (GCM10) would next be considered. If this mechanism was triggered then any residual revenue remaining after the TO Entry commodity rebate (GCM10) had been paid would be redistributed by the proposed GCM12 mechanism subject to this being greater than the £1m threshold.

7.4 EDF's understanding of the sequence in which the mechanisms could be used is correct. The wording of the GCM12 proposal sought to make it clear that National Grid would have no discretion to use GCM12 before the potential to redistribute revenue through GCM09 and GCM10 had been exhausted.

Clarification Regarding Capping the Credit at the SO Commodity Charge Level

7.5 EON commented "that with the increasing prevalence of auctions in the capacity regime that ever more complex charging proposals are needed to resolve some of the unforeseen or unintended consequences we are now seeing. Unfortunately, the complexity of the charging arrangements makes it very difficult for Users to understand how National Grid is performing in relation to its allowed revenue and its incentive regime (for both Entry and Exit), which is key in terms of predicting future price changes. As a result, we would encourage National Grid NTS to provide more detailed information and commentary (similar to that provided by DNs under UNC Modification Proposal 186) to support Users in this regard."

7.6 The following clarification of this proposal has been added to show how the level of the rebate through this charge might be forecasted based on information published by National Grid.

7.7 The credit paid through this proposal would represent a negative TO commodity charge having applied and therefore would equate to a rebate of the SO commodity charges. Under the prevailing charging arrangements, Shippers see a combined NTS entry commodity charge taking into account both the SO and TO rates. This proposal would only apply if the TO commodity rate had been set to zero or all TO commodity charges had already been rebated.

7.8 In order to ensure that the credit paid through this proposal was not in excess of the SO commodity charge paid, given the potential for different SO commodity charge rates to apply throughout the formula year, the available credits would be prorated to each price change period[3] based on the SO Entry Commodity, excluding optional ("short-haul") commodity, charges paid. Credits would then be capped at 100% of the SO Entry Commodity charges such that the combined impact of SO and TO Entry Commodity charges did not represent a credit to Shippers.

7.9 The consequence of this proposal would be that if the value of the credits paid through the proposed mechanism represented X% of all SO Entry Commodity charges paid then each Shipper would receive a credit representing X% of the SO Entry Commodity charges that it had paid over the formula year. For the avoidance of doubt, this calculation excludes optional ("short-haul") entry commodity charges. National Grid has started to publish NTS target and collected revenue figures and hence it should be possible for Shippers to forecast the potential impact of the credit proposed.

7.10 The wording of the final proposal has been based on this description of how each Shipper's credit is calculated to increase transparency. National Grid would keep SO Entry Commodity charges and TO Entry Credits separate for reporting purposes against the relevant price controls.

[3] A price change period is a period within the formula year for which a fixed commodity rate applies. There are typically two price change periods; 1St April to 30th September and 1st October to 31st March.

8 Final Proposal

8.1 National Grid proposes that:

K Management

- The Licence defined TOK_t ('K') term would be split into separate Entry and Exit K components for the purposes of setting charges
- The applicable interest rate used to calculate K within the Licence depends on whether there has been over or under recovery. The rules used to calculate the entry and exit specific K components, which ensure that the sum of the two components equals the Licence K calculation, are laid out in appendix B. Examples of how these rules would be applied are laid out in appendix C.

Trigger

- The Retrospective Negative TO Entry Commodity charge would be used if there remained a residual over recovery amount after taking into account any revenue redistributed via the TO Entry Commodity Rebate Mechanism (as described in GCM10)
    - The TO Entry Commodity rebate (GCM10) mechanism would be triggered if there remained a residual over recovery amount after taking into account any revenue redistributed by the buy back offset mechanism (as described in GCM09)
- The mechanism would be triggered, in the event of TO over recovery, even if the buy back offset mechanism (GCM09) or the TO Entry Commodity Rebate Mechanism (GCM10) had not been triggered
- The mechanism would be triggered at the end of the formula year based on the outcome of all NTS Entry Capacity auctions that represented a TO revenue stream.

Mechanism

- Any residual TO entry revenue remaining after taking into account credits resulting from the Entry Capacity buy-back offset (GCM09) and the TO Entry Commodity Rebate (GCM10) mechanisms would be available as a credit to shippers .
    - As specified by GCM09, any residual over recovery at the end of the formula year would first be used to offset buy backs costs in those months within the formula period when buy-back costs had occurred and no credit had been paid or where the credit was less than the buy-back cost.
    - As specified by GCM10, any residual over recovery at the end of the formula year would secondly be used to rebate TO Entry Commodity charges paid within the formula period.
- Credits would only be paid based on relevant entry allocations i.e. those allocations that would attract the TO Entry Commodity charge.
- Credits would only be paid if the residual over recovery was in excess of £1m (this equates to the minimum TO Entry Commodity price of -0.0001 p/kWh)

- Each Shipper's credit would be calculated as a proportion of the total available credits based on the ratio of that Shipper's SO Entry Commodity charges to the aggregate of all SO Entry Commodity charges paid over the formula year e.g. if the value of the credits paid through the proposed mechanism represented 5% of all SO Entry Commodity charges paid then each Shipper would receive a credit representing 5% of the SO Entry Commodity charges that it had paid over the formula year. For the avoidance of doubt, this calculation excludes optional ("short-haul") entry commodity charges. The credit would be treated as TO for regulatory reporting.
- Credits would be paid following the end of the formula year. Note that NTS Entry Commodity charges for the last month of the formula year (March) are invoiced in the following May.

Implementation

It is proposed that these arrangements are implemented with effect for the 2009/10 formula year and hence from 1st April 2009.

9 How the Proposed Modification Achieves the Relevant Objectives

Assessment against Licence Objectives

9.1 The National Grid plc Gas Transporter Licence in respect of the NTS requires that proposed changes to the Charging Methodology shall achieve the relevant methodology objectives.

9.2 Where transportation prices are not established through an auction, prices calculated in accordance with the methodology should:

- 1) Reflect the costs incurred by the licensee in its transportation business;
- 2) So far as is consistent with (1) properly take account of developments in the transportation business;
- 3) So far as is consistent with (1) and (2) facilitate effective competition between gas shippers and between gas suppliers.

9.3 National Grid believes that GCM12 would satisfy the relevant objectives as, in improving the efficiency of the TO Entry Commodity process and the Entry and Exit under/over revenue recovery processes, the likelihood of over recovery is reduced and the aggregate of all entry and exit charges would more closely reflect the costs incurred within and across the formula years.

9.4 GCM12 should prevent cross subsidies between entry and exit Users and hence should facilitate effective competition between gas shippers and between gas suppliers through more stable and transparent charges.

9.5 The proposal modifies the TO Over recovery mechanism to take into account past and potential future changes to the NTS Entry Capacity regime. This proposal is consistent with and compliments the enduring entry trade and transfer arrangements and with the potential for more variable exit revenue which may be a consequence of exit reform and hence “takes into account developments in the transportation business”.

9.6 National Grid would like to highlight the quarterly charge setting report that it has recently developed which allows interested parties to track the determination and collection of TO & SO commodity charges. This report will assist interested parties in understanding how National Grid is performing against allowed NTS revenue and the potential impact this would have on future NTS charges. National Grid believes that this compliments the GCM12 proposal.

Assessment against EU Gas Regulations

9.7 EC Regulation 1775/2005 on conditions for access to the natural gas transmission networks (binding from 1 July 2006) are summarised below. The principles for network access tariffs or the methodologies used to calculate them shall:

- Be transparent
- Take into account the need for system integrity and its improvement
- Reflect actual costs incurred for an efficient and structurally comparable network operator
- Be applied in a non-discriminatory manner
- Facilitate efficient gas trade and competition
- Avoid cross-subsidies between network users
- Provide incentives for investment and maintaining or creating interoperability for transmission networks
- Not restrict market liquidity
- Not distort trade across borders of different transmission systems.

9.8 National Grid believes that GCM12 is consistent with the principles listed above, specifically the amended methodology should;

- Be transparent
- Reflect actual costs incurred for an efficient and structurally comparable network operator
- Be applied in a non-discriminatory manner
- Avoid cross-subsidies between network users
- Not restrict market liquidity
- Not distort trade across borders of different transmission systems.

Appendix A – History of TO Over/Under Recovery NTS Charging Methodology Proposals

The following table outlines the history of the development of the TO over and under recovery mechanisms. The table gives the relevant Pricing Consultation paper number and title along with a brief summary of the proposal and the Authority decision.

Number	Title	Proposal	Decision
PC65	Alternative Methods of Funding Entry Capacity Constraint Management	If auction implied revenue is more than 10% above the target TO allowable revenue, this excess is divided into monthly amounts and is used to pay a credit which offsets the capacity neutrality entry capacity buy-back costs	**Not vetoed**
PC66	Transportation Charge adjustment following Entry Capacity Auctions	Any under recovery would be accounted for through the generality of transportation charges rather than just the NTS Commodity charge	**Not vetoed**
PC67	Technical Adjustment to PC65 Mechanism	Technical adjustment that allowed the credit to be greater than the entry charges paid by an individual shipper	**Not vetoed**
PC75	NTS TO Commodity Charge	Introduction of an NTS TO Commodity charge (that may be negative) to supersede PC65 (compliment PC65 in final proposal)	**Vetoed**
PD17	Setting of NTS Transportation Charges	Consideration of whether the charging methodology is consistent with auction uncertainty	N/A
PC77	NTS TO Commodity Charge	Introduction of an NTS TO Commodity charge (that may be negative) as the primary over/under recovery mechanism with PC65/67 as the secondary mechanism	**Vetoed**
PC78	NTS TO Commodity Charge (NTS TO Under Recovery)	Introduction of an NTS TO commodity charge as a mechanism for dealing with the under recovery of NTS TO revenue only.	**Not vetoed**
GCM09	TO Over Recovery Mechanism	Revise the buy-back offset mechanism to; o make the full over recovery amount available in the first month o make retrospective credits in relation to any buy-back costs incurred earlier within the formula year, o make credits up to the buy-back cost rather than up to the net buy-back cost, o clarify that the mechanism can be triggered by any NTS Entry Capacity auction that represents a TO revenue	**Not vetoed**
GCM10	TO Entry Commodity Rebate	Revise the TO entry over recovery mechanism by; o introducing a TO Entry Commodity Charge rebate mechanism in relation to TO Entry Commodity charges paid earlier in the year	**Not vetoed**
GCM11	Negative TO Entry Commodity	Revise the TO entry over recovery mechanism by; o introducing a TO Entry Commodity credit mechanism representing a negative TO Entry Commodity charge having applied over the full formula year	**vetoed**

Appendix B – Calculation of Separate Entry and Exit TOK for NTS Charging Purposes

The following table defines the calculations that would be used to calculate separate entry and exit K from the reported TOKt term defined within the national Grid Licence in respect of the NTS.

Net Position	Exit	Entry	Calculation
Net Over Recovery	Exit Over recovery	Entry Under-recovery	TOKEnt = (TOREn t-1 – TOMAREnt-1) x (1+ IRt/100) TOKExt = TOKt – TOKEnt
	Exit Under-recovery	Entry Over recovery	TOKExt = (TORExt-1 – TOMARExt-1) x (1+ IRt /100) TOKEnt = TOKt – TOKExt
	Over Recovery		TOKExt = (TORExt-1 – TOMARExt-1) x (1+ (IRt + PIt)/100) TOKEnt = (TOREnt-1 – TOMAREnt-1) x (1+ (IRt + PIt)/100)
Net Under Recovery (or zero)	Exit Over recovery	Entry Under-recovery	TOKExt = (TORExt-1 – TOMARExt-1) x (1+ IRt /100) TOKEnt = (TOREnt-1 – TOMAREnt-1) x (1+ IRt /100)
	Exit Under-recovery	Entry Over recovery	
	Under Recovery		

Where

TOKEnt ~ TO Entry Revenue adjustment factor in respect of formula year t for charging purposes

TOREnt-1 ~ TO Entry Revenue collected in year t-1

TOMAREn t-1 ~ TO Maximum Allowed Revenue allocated to Entry in the Charging Methodology

IRt ~ Percentage interest rate in respect of formula year t [Licence Special Condition C8B (3)(d)]

PIt ~ Penalty interest rate in respect of formula year t [Licence Special Condition C8B (3)(d)]

TOKt ~ Revenue adjustment factor in respect of formula year t [Licence Special Condition C8B (3)(d)]

TOKExt ~ TO Exit Revenue adjustment factor in respect of formula year t for charging purposes

TORExt-1 ~ TO Exit Revenue collected in year t-1

TOMARExt-1 ~ TO Maximum Allowed Revenue allocated to Exit in the Charging Methodology

Appendix C – Examples of Separate Entry and Exit TOK for NTS Charging Purposes

The following table includes examples of the calculation of separate entry and exit K from the reported TOK_t based on the methodology set out in appendix B.

Example	Entry After GCM10/11 payments	Exit	Total	Licence K	Existing	Proposed	
					Entry & Exit K	Entry K	Exit K
1.	-£1m	-£1m	-£2m	-£2.1m	-1.05m	-£1.05m	-£1.05m
2.	-£1m	£0.5m	-£0.5m	-£0.525m	0.2625m	-£1.05m	£0.525m
3.	-£1m	£1m	0	0	0	-£1.05m	£1.05m
4.	-£1m	£1.5m	£0.5m	£0.54m	0.27m	-£1.05m	£1.59m
5.	0	-£1m	-£1m	-£1.05m	-0.525m	0	-£1.05m
6.	0	£1m	£1m	£1.08m	0.54m	0	£1.08m
7	£0.5m	-£1.5m	-£1m	-£1.05m	-0.5025m	£0.525m	-£1.575m
8.	£0.5m	-£0.5m	0	0	0	£0.525m	-£0.525m
9.	£0.5m	-£0.4m	£0.1m	£0.108m	£0.054m	£0.528m	-£0.42m
10.	£0.5m	£0.5m	£1m	£1.08m	£0.54m	£0.54m	£0.54m

K = Actual minus Allowed Revenue. (Positive = Over recovery, Negative=under-recovery, K is subtracted from allowed revenue in the following year)

Interest rate assumed for the purposes of these examples ~ 5.00% under-recovery, 8% over recovery.

- In examples 1, 2, 3, 5, 7 & 8 there is either a zero or net under recovery and the lower rate applies to both entry and exit.
- In examples 4, 6 & 9 there is a net over recovery but with one of the components under recovering. In these examples the lower interest rate is applied to the component that has under recovered with the over recovery component K figure being calculated as the Licence K figure minus the under recovery component.
- In example 10 both entry and exit represent over recovery and the higher rate applies to both entry and exit.