

CONCLUSION REPORT TO THE AUTHORITY

**Modification Proposals to the Gas Transmission
Transportation Charging Methodology**

**NTS GCM 05 Re-Consultation:
NTS Exit (Flat) Capacity & Exit Reform**

3rd March 2009

Table of Contents

EXECUTIVE SUMMARY	1
Implementation.....	2
Indicative Prices	2
Future Proposals.....	2
1 INTRODUCTION	3
Enduring Annual NTS Exit (Flat) Capacity.....	3
Annual NTS Exit (Flat) Capacity	3
Daily NTS Exit (Flat) Capacity.....	3
Off-Peak Daily NTS Exit (Flat) Capacity	3
2 BACKGROUND	4
3 TERMS OF THE ORIGINAL PROPOSAL	5
4 DISCUSSION AND ISSUES	7
The Licence & Revenue Foregone	7
Transportation Model Inputs	7
Treatment of Bi-directional System Points.....	9
Price Control Boundary Issues.....	9
Interruption	9
Offtake Specific v Exit Zone Prices.....	9
SO & TO Commodity	10
Implementation.....	10
5 REPRESENTATIONS MADE	11
Support for the Proposal	11
Summary of Responses by Consultation Question	11
Other Issues raised by the Consultation	18
Summary of Responses by Relevant Objectives.....	19
6 CHANGES TO THE ORIGINAL PROPOSAL IN LIGHT OF REPRESENTATIONS MADE ...	23
7 FINAL PROPOSAL	24
Implementation.....	25
Indicative Prices	25
Future Proposals.....	25
8 HOW THE PROPOSED MODIFICATION ACHIEVES THE RELEVANT OBJECTIVES	26
Assessment against Licence Objectives.....	26
Assessment against EU Gas Regulations	27
APPENDIX A – LICENCE IMPLICATIONS OF EXIT REFORM.....	28
APPENDIX B – INDICATIVE NTS EXIT (FLAT) CAPACITY PRICES	30
APPENDIX C – INDICATIVE NTS EXIT (FLAT) COMMODITY PRICES.....	39
APPENDIX D - TIMELINES	40

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 “NTS Charging Methodology”) in respect of the introduction of NTS Exit (Flat) Capacity Charges and the removal of interruptible credits. These proposals have been consulted on for the required 28 day period and are being brought forward in relation to the direction for implementation of UNC Modification Proposal 0195AV which is introducing NTS Exit Reform.

GCM05: National Grid proposes through this document that:

- A consistent approach to the setting of actual, indicative and auction reserve prices for NTS Exit (Flat) Capacity is taken
- Nodal, offtake specific, NTS Exit (Flat) Capacity prices are set
- Interruption credits are removed from the NTS Charging Methodology
- The Transportation Model is used for estimating Long Run Marginal Costs (LRMCs) for the purposes of determining Annual/Enduring Annual NTS Exit (Flat) Capacity prices and reserve prices for daily firm NTS Exit (Flat) Capacity auctions based on a single year network model and supply/demand data for the relevant Gas Year;
 - For Annual/Enduring Annual NTS Exit (Flat) Capacity, actual prices (p/kWh/day) will be set for the forthcoming Gas Year based on the supply data, baselines, obligated entry capacity and network model for that year;
 - For Daily NTS Exit (Flat) Capacity, the auction reserve price will be set at the Annual/Enduring Annual NTS Exit (Flat) Capacity price in place for that Gas Day.
 - For Off-Peak Daily NTS Exit (Flat) Capacity auctions, the reserve price will be zero.
- Defined inputs to the Transportation Model
 - Network ~ the network model comprising the nodes and pipe lengths would represent the Year of capacity release. The model would represent committed projects as indicated by the Ten Year Statement. Where network models are generated for indicative prices for the first application, sufficient pipe to allow connection of all new entry and exit points would be included.
 - Supply Data ~ Ten Year Statement (No Change)
 - Supply Balancing ~ Merit order (No Change ~ subject to review)
 - Demand Data ~ flow data will be based on Baseline and obligated incremental exit capacity levels other than bi-directional system points which will be assumed to be in supply mode and hence will have a zero exit flow. Capacity data will be the baseline quantities. Sites representing incremental capacity release will have the capacity level (but not the flow level) capped at the baseline level as this is the level of capacity that represents TO revenue; capacity in excess of this level represents SO revenue.

- Target revenue ~ TO exit target revenue calculated in accordance with the Charging Methodology and NTS Licence (No Change)
- Expansion factor ~ calculated in gas year N-4 based on the costs of constructing NTS capacity for 1st October in gas Year N. (e.g. the expansion factor for gas year starting 1st October 2012 would be set in the summer of 2009 and would apply for setting prices for all applications and auctions for gas year starting 1st October 2012 including daily auctions)
- Anuitisation factor ~ Implied by the NTS Licence (allowed rate of return, operating expenditure allowance and anuitisation period) at the time of setting prices. (No Change)
- The NTS (Flat) Commodity charge rate would be determined from a combination of SO & TO charges
 - The SO NTS Exit (Flat) Commodity charge maps onto and replaces the existing SO NTS Exit Commodity charge.
 - A new TO Exit (Flat) Commodity charge is introduced in addition to the SO Exit (Flat) Commodity charge
 - The level of the TO Exit (Flat) Commodity charge would be set to seek to adjust the level of TO collected exit revenue if there is forecast to be under recovery.
 - The NTS TO Exit (Flat) Commodity charge will have an identical structure and application to the NTS SO Exit (Flat) Commodity charge

Implementation

It is proposed that these arrangements are implemented with effect from 1st April 2009. Implementation of UNC 0195AV requires an initial application in the summer of gas year 2009 for capacity from 1st October in gas year 2012 and then summer year N for gas year starting 1st October N+4. As a consequence there would be a phased implementation as indicated by the timelines in Appendix D - Timelines.

Indicative Prices

Indicative capacity and commodity prices are included in Appendix B – Indicative NTS Exit (Flat) Capacity Prices and Appendix C – Indicative NTS Exit (Flat) Commodity Prices.

Future Proposals

Further proposals might be required to cover NTS TO Exit over recovery as a consequence of revenue from daily exit capacity auctions. Over recovery might be managed by a reduced or negative TO Exit Commodity Charge however National Grid's reasonable endeavours obligation to only set commodity charges twice a year on 1st April and 1st October might not be sufficiently flexible. It may be more appropriate to investigate rebate mechanisms consistent with those introduced for NTS TO Entry revenue over recovery.

1 Introduction

- 1.1 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 “NTS Charging Methodology”) in respect of the introduction of NTS Exit (Flat) Capacity Charges and the removal of interruptible credits.
- 1.2 These proposals have been consulted on for the required 28 day period and are being brought forward in relation to the direction for implementation of UNC Modification Proposal 0195AV which is introducing NTS Exit Reform.
- 1.3 In regards to the primary ‘flat’ capacity product 0195AV introduces four capacity products, albeit with slightly different arrangements, and this document covers the pricing of those products. The products are;
 - Enduring Annual NTS Exit (Flat) Capacity
 - Annual NTS Exit (Flat) Capacity
 - Daily NTS Exit (Flat) Capacity
 - Off-Peak Daily NTS Exit (Flat) Capacity
- 1.4 The document also covers NTS Exit (Flat) Commodity charge setting.

Enduring Annual NTS Exit (Flat) Capacity

- 1.5 Users will be able to apply for such rights via an annual window in Summer of Gas Year N for Gas Year N+4 onwards. Ad-hoc applications can also be requested.

Annual NTS Exit (Flat) Capacity

- 1.6 Users will be able to apply for such rights in Summer of Gas Year N for Gas Years N+1, N+2 and N+3 via an annual process.

Daily NTS Exit (Flat) Capacity

- 1.7 Users will be able to bid for such rights ahead of and during the Gas Day via daily auctions.

Off-Peak Daily NTS Exit (Flat) Capacity

- 1.8 Users will be able to bid for Off-Peak Daily NTS Exit (Flat) Capacity rights ahead of the Gas Day via daily auctions. The available amount would be made up of
 - “Use it or lose it” (UIOLI),
 - discretionary release, and
 - "Daily Off-peak NTS Exit (Flat) Capacity" - this will be auctioned on D-1 but only on days where forecast demand at 13.30 D-1 is less than 80% of 1 in 20 peak day demand. The amount available would include the Maximum Supply Point Offtake rate multiplied by 24 minus Firm sold.

2 Background

- 2.1 Three National Grid gas charging discussion papers (GCD01, GCD02 & GCD03) were issued and consulted on between October and November 2006 in relation to the UNC 0116 Modification Proposal and variants.
- **NTS GCD 01** covered NTS Exit (Flat) Capacity and the generation of Prevailing¹ NTS Exit (capacity) Capacity prices and Annual and Daily reserve prices.
 - **NTS GCD 02** covered NTS Exit (Flexibility) Capacity and Commodity including reserve prices for annual and daily auctions and a new SO Flexibility Commodity Charge.
 - **NTS GCD 03** covered TO under and over-recovery mechanisms
- 2.2 As a consequence of the discussions and given the potential timelines for the first NTS Exit (flexibility) Capacity auctions, the GCM04 pricing proposal was issued and consulted on over February and March 2007. GCM04 proposed a zero reserve price for NTS Exit (Flexibility) Capacity for the annual and daily auctions. Following the submission of a report containing this proposal to the authority, GCM04 was not vetoed and hence now forms part of the NTS Charging Methodology. This section of the methodology has subsequently become redundant due to the successful appeal of the Authority decision to direct implementation of UNC Modification Proposal 0116V.
- 2.3 Respondents to GCD01 were supportive of the setting of NTS TO Exit (Flat) Capacity charges based on the Transportation model approach. Support for the approach was subject to the adjustment of Exit Capacity charges and reserve prices to aim to recover the total TO Exit Capacity target allowed revenue through NTS Exit (Flat) Capacity charges.
- 2.4 In light of the responses to GCD01 and UNC Modification Proposals UNC0195 & 0195AV, National Grid raised and consulted on charging methodology proposal GCM05 on 18th July 2008. GCM05 proposed the adjustment of Exit Capacity charges and reserve prices to aim to recover the total TO Exit Capacity target allowed revenue through NTS Exit (Flat) Capacity charges.
- 2.5 In its 19th January 2009 decision letter on 0195AV, Ofgem made the following comments; *“Alongside the modifications to the UNC being considered here, NGG are currently consulting on the proposals to modify the gas transmission transportation charging methodology. Under the Transmission Licence, revenue forgone (ie capacity charges from interruptible shippers had they been firm) is collected as SO incentive revenue. Once an enduring offtake regime is in place, these revenues will become part of the Transmission owner (TO) revenues. We do not consider it appropriate that those shippers that book firm exit capacity should have to bear all of the cost of the forgone revenue through increased exit capacity charges. Instead, it would be more appropriate that any shortfall between allowed exit revenue and exit capacity charge revenues is recovered through a commodity charge so that all users of the system (both firm and interruptible) contribute towards the transmission system costs and would expect the current charging consultation to reflect these views.”*

¹ Prevailing NTS Exit (Flat) Capacity under the 0116 suite of UNC proposals equated to Enduring NTS Exit (Flat) Capacity under 0195AV.

3 Terms of the Original Proposal

3.1 Through the NTS GCM 05 re-consultation, National Grid proposed that:

- A consistent approach shall be taken for the generation of actual, auction reserve and indicative prices as required
- Nodal, offtake specific, NTS Exit (Flat) Capacity prices are set
- Interruption credits are removed from the NTS Charging Methodology
 - Bilateral contracts, leading to surrender charges, will result from 0195AV as required
- NTS Exit (Flat) Capacity Prices are calculated using the prevailing NTS Charging Methodology for NTS Exit Capacity Prices
- The Transportation Model is used for estimating Long Run Marginal Costs (LRMCs) for the purposes of determining Annual/Enduring Annual NTS Exit (Flat) Capacity prices and reserve prices for daily firm NTS Exit (Flat) Capacity auctions based on a single year network model and supply/demand forecast for the relevant Gas Year;
 - For Annual and Enduring Annual NTS Exit (Flat) Capacity, charges will be set for the forthcoming Gas Year based on the supply data, baselines and network model for that year;
 - For daily firm reserve prices, the reserve price will be set based on the Prevailing NTS Exit (Flat) Capacity charge in place for that Gas Day.
 - For Off-Peak Daily NTS Exit (Flat) Capacity auctions, the reserve price will be zero.
- Defined inputs to the Transportation Model
 - Network ~ the network model comprising the nodes and pipe lengths would represent the Year of capacity release. The model would represent committed projects as indicated by the Ten Year Statement. Where network models are generated for indicative prices for the first application sufficient pipe to allow connection of all new entry and exit points would be included.
 - Supply Data ~ Ten Year Statement (No Change)
 - Supply Balancing ~ Merit order (No Change ~ subject to review)
 - Demand Data ~ flow data will be based on baseline and incremental exit capacity levels other than bi-directional system points which will be assumed to be in supply mode and hence will have a zero exit flow. Capacity data will be the baseline quantities. Sites representing incremental capacity release will have the capacity level (but not the flow level) capped at the baseline level as this is the level of capacity that represents TO revenue; capacity in excess of this level represents SO revenue.
 - Target revenue ~ TO revenue calculated in accordance with the NTS Charging Methodology and NTS Licence (No Change)

-
- Expansion factor ~ calculated in gas year N-4 based on the costs of constructing NTS capacity for 1st October in gas Year N. (e.g. the expansion factor for gas year starting 1st October 2012 would be set in the summer of 2009 and would apply for setting prices for all applications and auctions for gas year starting 1st October 2012 including daily auctions)
 - Anuitisation factor ~ Implied by the NTS Licence (allowed rate of return, operating expenditure allowance and anuitisation period) at the time of setting prices. (No Change)
 - The NTS (Flat) Commodity charge rate would be determined from a combination of SO & TO charges;
 - a new SO Exit (Flat) commodity charge will map onto and replace the current SO Exit Commodity charge and
 - a new additional TO Exit (Flat) Commodity charge will be required to offset under recovery arising due to any shortfall between NTS Exit (Flat) Capacity charges and TO Exit allowed revenue.
 - The level of the TO Exit (Flat) Commodity charge would be set to seek to adjust the level of TO collected exit revenue if there is forecast to be under recovery .
 - The NTS TO Exit (Flat) Commodity charge would have an identical structure and application to the NTS SO Exit (Flat) Commodity charge.
 - Implementation
 - It was proposed that these arrangements would be implemented with effect from 1st April 2009. Implementation of UNC 0195AV requires an initial application in the summer of gas year N for capacity from 1st October in gas year N+4 e.g. summer 2009 for gas year starting 1st October 2012. As a consequence a phased implementation would be required as indicated by the timelines in Appendix D - Timelines.

4 Discussion and Issues

The Licence & Revenue Foregone

- 4.1 Interruptible supply points do not currently attract NTS Exit Capacity charges
- 4.2 Definition: 'Charges Foregone' are defined within the NTS Transportation Licence as those NTS Exit Capacity charges that Interruptible supply points would pay if they were Firm
- 4.3 Charges Foregone are (up to exit reform) included within the NTS Licence as SO allowed revenue and as TO actual (collected) revenue i.e. an increase in SO allowed revenue is cancelled out by an effective reduction in TO allowed exit revenue
- 4.4 Post Exit Reform there would be no 'Charges Foregone'.
- If all 'interruptible' demand converted to firm, in theory this would mean that NTS Exit (Flat) Capacity charges would remain unchanged.
 - In practise there may still be a change in prices as a consequence of the geographical redistribution of costs caused by higher supplies required to meet higher demand within the model.
 - If all 'interruptible' demand utilised off-peak capacity, this could mean that NTS Exit (Flat) Capacity charges would increase.
 - This would be avoided by setting NTS Exit (Flat) Capacity charges on baseline capacity levels and recovering the costs associated with unsold baselines through commodity charges.
- 4.5 Indicative prices for exit points based on the final proposal where exit capacity prices are adjusted to collect target revenue from the baseline capacity levels are included in Appendix B – Indicative NTS Exit (Flat) Capacity Prices. For comparison, 'as-is' prices are included which represent the prices that would apply if exit reform had not occurred.
- 4.6 There would be a consequential decrease in SO Commodity charges relative to the prevailing arrangements as a result of the removal of 'revenue foregone' allowed SO revenue. The impact of the removal of revenue foregone on the SO Commodity charge would be a reduction of 0.0028 p/kWh based on the data used for the indicative charges in Appendix B – Indicative NTS Exit (Flat) Capacity Prices. The impact of the proposal on TO Exit (Flat) Commodity charges based on a range of firm capacity bookings is shown in Appendix C – Indicative NTS Exit (Flat) Commodity Prices.
- 4.7 Exit reform related Licence changes are detailed in Appendix A – Licence Implications of Exit Reform.

Transportation Model Inputs

- 4.8 The options for setting NTS Exit (Flat) Capacity charges were discussed with the industry via GCD01 and at the Gas Transmission Methodologies Forum (TCMF). GCD01 set out a number of options with support only expressed for the use of the Transportation Model. National Grid continues to believe that the use of the Transportation Model to set NTS Exit (Flat) capacity charges is the most appropriate method and this section covers the Transportation Model input data that would be required.

4.9 Change to Transportation Model input data

- Network
 - The network model comprising the nodes and pipe lengths should represent the Year of capacity release. The model should represent committed projects as indicated by the Ten Year Statement. Where network models are generated for indicative prices for the first application sufficient pipe to allow connection of all new entry and exit points would need to be included.
- Supply
 - Using supply data from the Ten Year Statement would be consistent with the prevailing NTS Charging Methodology.
- Demand
 - Booked exit capacity was viewed as the most appropriate option however Ofgem raised concerns that this may lead to those relying on off-peak capacity not paying an appropriate proportion of TO costs. Lower firm booking would result in higher charges whereas higher firm bookings would result in lower charges.
 - Modelling and adjusting charges to baseline exit capacity would ensure stable charges and would ensure that those exit points relying on off-peak capacity would attract a more appropriate level of TO costs.
- Balancing S&D
 - This proposal will be based on the prevailing methodology; a merit order approach, where supplies are used one-by-one to reach the modelled demand level. Alternative options, such as scaling all or groups of supplies may lead to more stable prices and will be investigated. Any charging methodology change brought forward in this area to change the prevailing exit charging methodology would then apply to the enduring charging methodology. If supplies are insufficient to meet demand, Interconnector forecast flows are increased up to capability to achieve a supply & demand match.
- Expansion Factor
 - Calculation in the year of commitment would allow prices to be forecast more easily hence increasing transparency and would be consistent with the construction time-line.
- Anuitisation Factor
 - The anuitisation factor would be implied by the rate of return, asset life and opex defined in the Licence. There is an issue in that indicative prices will be generated in one price control period for the following price control period; however, the assumption that no change would be made seems appropriate as any change would be speculative. This will also keep allowed revenue inline with the anuitisation factor.

Treatment of Bi-directional System Points

- 4.10 The underlying assumption will be that bi-directional system points are treated as supplies within the model but baseline exit capacity will be included to ensure that prices can be adjusted appropriately to recover allowed revenue.
- 4.11 If bi-directional sites were to be included within the Transportation Model as exit flows there is a risk that the costs associated with local pipe work (i.e. those pipes that would flow towards the system point in exit mode but away from the system point in entry mode) would be included in both the entry and the exit prices hence leading to double counting.
- 4.12 National Grid will monitor the operation of bi-directional sites and keep this assumption under review.

Price Control Boundary Issues

- 4.13 Indicative annual prices would be published and required for defining financial user commitment. At times, these will be set for exit capacity in the following price control period and hence the allowed revenue will be unknown. In this scenario the allowed revenue, for the purposes of price setting only, would be calculated from rolling forward the prevailing price controls.

Interruption

- 4.14 Interruption credits are currently paid based on 1/15th of the firm capacity charges that would otherwise apply at an interruptible exit point, for each day of interruption in excess of 15 days.
- 4.15 Interruption credits are removed as part of 0195AV and hence this aspect will be removed from the NTS Charging Methodology. Alternative future firm curtailment requirements for capacity management purposes would be contracted for bi-laterally and the arrangements for payment are covered by 0195AV.
- 4.16 The quantity of Off-Peak Daily NTS Exit (Flat) Capacity released for auction on D-1 will be defined by three components;
- “Use it or lose it” (UIOLI),
 - discretionary release, and
 - on days when forecast demand at 13.30 D-1 is less than 80% of 1 in 20 peak day demand, the amount available would include the Maximum Supply Point Offtake Rate (MSPOR) multiplied by 24 minus Firm capacity sold.
- 4.17 As the cost of making the capacity available would already have been met, a zero reserve price should reflect the costs incurred and be consistent with the Licence relevant objectives for the Charging Methodology. No payment would be made for the scale back of Off-Peak Daily NTS Exit (Flat) Capacity.

Offtake Specific v Exit Zone Prices

- 4.18 As a consequence of the 0195AV UNC Modification Proposal, NTS exit zone prices would no longer be set and prices would be set on an offtake specific basis. Capacity at DN offtakes would be acquired and paid for by the DNOs and the DNOs would need to recover these costs through their transportation charges.

4.19 For comparison with prevailing NTS Exit Capacity prices, indicative NTS Exit (Flat) Capacity prices have been generated on a flow weighted average NTS exit zone basis, in accordance with the prevailing methodology for setting charges for DN exit points. National Grid anticipates that DNOs would bring forward DN Charging Methodology proposals as required to implement the consequences of Exit Reform. There is the potential for NTS exit zones to be retained within the DN Charging Methodology.

SO & TO Commodity

4.20 The NTS (Flat) Commodity charge rate would be determined from a combination of SO & TO charges;

4.21 A new SO Exit (Flat) commodity charge would be required to map onto and replace the current SO Exit Commodity charge.

4.22 A new additional TO Exit (Flat) Commodity charge would be required to offset under recovery arising from any shortfall between NTS Exit (Flat) Capacity charges and TO Exit allowed revenue. If NTS Exit (Flat) Capacity charges were set to recover TO Exit allowed revenue from the baseline capacity levels, a TO Exit (Flat) Commodity charge would need to be set to offset the lower level of revenue recovery resulting from unsold baseline capacity.

Implementation

4.23 In relation to a given gas year N (1st October to 30th September)

- Indicative prices for gas year N would be required for the initial application period for Enduring Annual NTS Exit (Flat) Capacity in gas year N-4.
- Subsequent years would require indicative prices to be generated for annual capacity in gas years N-3 and N-2, and actual prices for N-1
- Enduring Annual capacity prices, which would also represent daily reserve prices, would be generated in gas year N-1 for gas year N.

4.24 A timeline for the generation of indicative and actual prices is contained within Appendix D - Timelines.

4.25 Indicative capacity and commodity prices are included in Appendix B – Indicative NTS Exit (Flat) Capacity Prices and Appendix C – Indicative NTS Exit (Flat) Commodity Prices.

5 Representations Made

- 5.1 National Grid received 10 responses to its re-consultation on NTS GCM 05; 9 were in support and 1 was not in support. 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	Support
E.ON UK plc	EON	Not in Support
EDF Energy plc.	EDF	Support
International Power-Mitsui	IPM	Support
National Grid Distribution	NGGD	Support
RWE npower	RWE	Support
Scotia Gas Networks	SGN	Support
Scottish and Southern Energy plc	SSE	Support
Scottish Power	SP	Support
The AEP	AEP	Support

Summary of Responses by Consultation Question

Consistent approach to setting actual, indicative and auction reserve prices for NTS Exit (Flat) Capacity is taken

Respondents Views

- 5.2 “IPM agrees that the use of the Transportation Model for determining exit capacity prices for annual and enduring capacity and by extension for establishing the daily firm reserve prices represents a consistent and cost reflective approach. Also, given that the Transportation Model is available for Users to undertake their own modelling, IPM believes this transparency should help promote competition.”
- 5.3 “SGN agrees that a consistent approach should be adopted for the setting of actual, indicative and auction reserve prices for NTS Exit (Flat) Capacity.”
- 5.4 SP “believe that a consistent approach to setting actual, indicative and auction reserve prices for NTS Exit (Flat) Capacity should be taken and has been taken in the charging methodology.”

² GCM05 consultation responses can be found at ;

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

- 5.5 NGGD “agree that a consistent approach to setting actual, indicative and auction reserve prices for NTS Exit (Flat) Capacity should be taken. Since the actual prices to be paid will only be known after capacity is booked it is important that the indicative prices are as accurate an indication as possible of the actual prices to be paid since capacity booking decisions will be made on the basis of the indicative prices. If the indicative prices do not accurately reflect the actual prices to be paid then this could lead to investment decisions by the DN, in terms of trade-off between investment in distribution capacity or interruption choices and NTS capacity, which are economic and efficient based on the indicative price information but which might be seen as less-efficient in terms of the later actual NTS prices.”
- 5.6 AEP “support this approach “. AEP “welcome confirmation that the reserve price for off-peak capacity will be zero.”
- 5.7 “Centrica agrees that a consistent approach has been taken to setting actual, indicative and auction reserve prices for NTS Exit (Flat) Capacity.”

National Grid View

- 5.8 National Grid welcomes support for this aspect of the proposal and believes that a move to setting exit capacity prices based on baseline level flows rather than forecast flows will increase the stability of prices.

The prevailing methodology for NTS Exit Capacity Prices will be used for the purposes of determining Annual/Prevailing NTS Exit (Flat) Capacity prices and reserve prices for daily firm NTS Exit (Flat) Capacity auctions based on a single year network model, exit baselines plus incremental capacity and supply forecast for the relevant Gas Year.

Respondents Views

- 5.9 SGN comments “The prevailing methodology referred to is the use of the NTS Transportation Model, the use of which was consulted on in NTS GCM 01. SGN supported the use of the Transportation Model in that consultation and still does. The question of the use of a single year network model and supply/demand forecast for the relevant Gas Year was also consulted on in NTS GCM 01. The alternative was the use of a ten year supply and demand model using the current gas year’s base case data and network model as had been the case with the Transcost model.”
- 5.10 “SGN supported the use of the single year network model and supply/demand forecasts for the relevant Gas Year. The determination of capacity charges using a one-year model rather than a model relying on ten-year forecasts should be more accurate and therefore the results should be more cost-reflective. The removal of the ten year averaging will allow NGNTS to provide more specific temporal and locational pricing signals which should enable Users to make more informed investment decisions.”
- 5.11 “Notwithstanding the above, SGN do have a concern that the one year model might lead to greater volatility of prices because of the removal of the 10 year averaging in the Transcost methodology.”
- 5.12 SP support this approach.

- 5.13 NGGD “consider that the stability of prices resulting from the prevailing methodology should be demonstrated prior to its use. If the prevailing methodology does not result in stable prices then alternative approaches, possibly with different ways of balancing supply and demand for price setting purposes, capable of providing such stability should be considered. If the methodology used leads to unstable exit capacity charges this would make it difficult for the DN to determine a robust investment strategy since the NTS/DN investment trade-off could vary appreciably from year to year.”
- 5.14 AEP “support the use of the transportation model based on a single year network model using baselines and incremental capacity data to set the demand levels, although in principle using booked capacity and incremental capacity is an equally valid approach, since either could be argued to represent the network that NG has to provide.”
- 5.15 RWE “are broadly supportive on National Grid’s proposals as they are consistent with the principles incorporated into the NTS Charging Methodology following the adoption of the transportation model, brought about through Ofgem’s approval of GCM01.”
- 5.16 “Centrica agrees in principle with the proposed methodology for determining Annual/Enduring NTS Exit (Flat) Capacity prices or reserve prices for annual and/or daily firm auctions in that these should be based on a single year network model and supply/demand forecast. There does, however, need to be a review of the method of supply/demand balancing in order to see if it is possible to produce more stable prices while still retaining UKCS beach supplies at maximum. “

National Grid View

- 5.17 National Grid welcomes support for this aspect of the proposal but recognizes that further work is required to investigate the supply & demand balancing rules and supply source data used within the transportation model. This work has been initiated through the TCMF and initial analysis indicates that a move to setting exit capacity prices based on baseline level flows rather than forecast flows should increase the stability of prices. This area of work is being progressed through charging discussion paper GCD06.

The expansion factor, the unit cost (£/GWhkm) of adding capacity, will be determined in year N in relation for setting all exit prices for year N+4.

Respondents Views

- 5.18 SGN comments “The expansion factor is a useful indication of potential charges to new entrants, however SGN do not agree that the indicative charges should be used for the User Commitment, these should be calculated from the current NTS Exit Capacity price. This will allow Users to understand the value of their commitment prior to making a formal application and give greater certainty that the value would not be greater than the actual values incurred from the effective date.”
- 5.19 “Centrica agrees that the expansion factor will be determined in year N in relation to setting all exit prices for year N+4. “ NGGD, SP and AEP also offer support for this approach.

National Grid View

5.20 National Grid welcomes support for this aspect of the proposal. Issues relating to user commitment are covered later in this section 5.

The annuitisation factor used (currently 0.10272) will be that calculated from the allowed rate of return, operating expenditure allowance and the assumed asset life (currently 45 years) implied by the NTS Licence, at the time of setting prices.

Respondents Views

5.21 SGN “agrees with this approach as it is consistent with the approach used in SGN.” SP support this approach. NGGD, AEP, and Centrica also offer support for this approach.

National Grid View

5.22 National Grid welcomes support for this aspect of the proposal.

Nodal NTS Exit (Flat) Capacity prices are generatedRespondents Views

5.23 “IPM supports the calculation of capacity charges on a nodal rather than a zonal basis on the grounds that nodal (offtake specific) capacity allocation represents a more cost-reflective solution.” SP and Centrica also support this approach.

5.24 “SGN recognises that Nodal NTS Exit (Flat) Capacity pricing is consistent with the provisions of Mod 195AV. However, to allow the DN Output Capacity Incentive for 20012/13 to be calculated in compliance with the DN Licences NTS NG will need to publish in their 2009/10 Transmission Charges Statement the indicative Exit Capacity charges for 2012/13 by Exit Zone.”

5.25 NGGD comments “Since exit (flat) capacity will be sold on a nodal basis then it would seem appropriate to set prices on a nodal basis. However, it is important that prices set on a nodal basis are stable, both in terms of indicative to actual prices comparison, and from one year to another. If nodal level prices are unstable, in either manner, then this will undermine their usefulness in giving locational signals for capacity booking. We consider that further information on the price stability of the proposed approach on individual nodal exit prices should be provided prior to implementation.”

5.26 AEP “support this approach, but note that it remains unclear as to how these charges will be passed onto DN shippers and customers.” RWE comments “With the continued absence of any information from DNs on how they intend to pass on the costs of NTS exit capacity to their LDZ connected customers, we continue to harbour concerns about the prospect of material impacts on shipper/supplier registration billing systems should DNs move away from charging LDZ customers based on their LDZ Exit Zone. We trust that DNs will be in a position to assuage these concerns very shortly.”

National Grid View

5.27 National Grid welcomes support for this aspect of the proposal. Initial analysis presented at the January 2009 Gas TCMF indicates that a move to setting exit capacity prices based on baseline level flows rather than forecast flows should increase the stability of nodal prices.

- 5.28 National Grid firmly believes that the Transportation Model provides the appropriate level of locational signals as it is based on flow direction, distance traveled, and investment costs which are the fundamental drivers for transportation costs.

For Off-Peak Daily NTS Exit (Flat) Capacity auctions, the reserve price will be zero

Respondents Views

- 5.29 “IPM agrees that a reserve price of zero is appropriate for the daily off-peak product. Practically, the cost of making the capacity available will have already been met, and the zero reserve price would reflect the flexibility available to the Transmission Operator. “

National Grid View

- 5.30 National Grid welcomes support for this aspect of the proposal. The definition of the product in terms of unutilized booked capacity implies that a zero reserve price is a cost reflective approach.

Interruption credits are removed

Respondents Views

- 5.31 “SGN agrees with this change to the transmission charging methodology as it is consistent with the removal of interruption credits under mod 195AV. It would also be consistent with the changes in the distribution charging methodology following UNC Mod 90.” AEP “believe this is consistent with the implementation of modification 195AV”. This view is supported by NGGD, Centrica and SP.

National Grid View

- 5.32 National Grid welcomes support for this aspect of the proposal.

NTS (Flat) Commodity charge rate would be determined from a combination of SO & TO charges

Respondents Views

- 5.33 “IPM agrees that the commoditisation of costs relating to any unsold baseline capacity (assuming some uptake of the daily off-peak capacity) would be reasonable as this ensures any shortfall in transmission system costs is recovered from all users.”
- 5.34 “SGN does not object to these proposals. The use of baseline capacity to calculate the level of the Exit Capacity charges should help to make these charges more stable.”
- 5.35 SP comments that this approach “is consistent with the existing arrangements at entry, although we feel that exit capacity is so very different from entry that we do not expect significant over or under-recovery. Also the reserve prices and auction methodology are set on a considerably different basis.” SP “believe that the over and under-recovery mechanisms should be consistent and preferably set at the same time for transparency ahead of bidding in an auction. Otherwise the mechanisms could be determined once the outcome of the auctions has been realized.”

- 5.36 EON “do not see the need to consider changes to exit commodity charges at this time.” EON comments “Although we accept that it reasonable to remove the interruptible credit with the eventual removal of interruptible status it is important to note its replacement with the Off-Peak Daily NTS (Flat) Exit Capacity service does not come into effect until 1 October 2012. We therefore do not understand why National Grid is seeking to establish a TO Exit Flat Commodity charge at this stage as application of the charge (or rather rebate) should only be relevant as a result of receipt daily capacity auctions revenue generated after this date.”
- 5.37 NGGD “support the proposed basis for determining the NTS (Flat) commodity charge rate.”
- 5.38 AEP “consider that it is not entirely clear whether the same parties that pay SO commodity charges will pay TO commodity charges. If they are the same parties, then simple aggregation as detailed in the charging methodology is appropriate. However if they are paid by different parties then the two types of charges might need to be identified separately in the UNC. The Ofgem decision letter for mod 195AV clearly suggested that this could be the case. We consider that in principle if there is to be a TO commodity charge then it should be paid by the same parties that pay TO exit capacity charges.”
- 5.39 AEP “are not convinced that the issue of how an under-recovery situation is managed needs to be addressed at this point in time. We consider it would be better to leave this until there is a better understanding of the magnitude of the problem. It is not possible to pre-judge the commercial strategies of shippers with regard to capacity bookings under the enduring regime. As a general principle we consider that TO costs / allowed revenue should be recovered through capacity rather than commoditised into non cost reflective commodity charges.”
- 5.40 RWE comments “Whilst we recognise that under recovery (and for that matter over recovery) of allowed TO Exit revenue is an issue which needs to be addressed, we do not think this is a priority bearing in mind it is unlikely to materialise to any significant extent until formula year 2012/13 and GCM12 will ensure any exit under recovery in the interim is smeared back collectively to Shipper Users. Unsurprisingly National Grid seem keen to address exit under recovery post exit reform by replicating the arrangements at entry, introducing a new NTS Exit (Flat) TO Commodity charge payable by Shipper Users in conjunction with the current SO NTS Exit Commodity Charge. While this may ultimately be an appropriate solution, making such a decision now prevents consideration of other ways such an under recovery could be smeared back to Users (e.g. though capacity smear back or positive off-peak reserve prices). These might be more appropriate bearing in mind the fact that although DNO Users will not pay commodity charges they may contribute towards an under recovery occurring by reducing their firm capacity bookings below baselines in response to the current flat capacity incentive targets that exist in their licence.”
- 5.41 SSE “understands that any shortfall in TO exit capacity revenue will be recovered via a TO exit commodity charge. If all baseline capacity were sold at reserve prices then there would be no under or over recovery. It is not known at this time if current interruptible sites will use off-peak or firm capacity. We might be creating a solution to a problem that is not material or introduce widespread commoditisation of a capacity charge as in Entry. Not withstanding the above, SSE is supportive of GCM05.”

- 5.42 "Centrica agrees with the principle that a new SO Exit (Flat) commodity charge will replace the current SO Exit Commodity charge and that a new additional TO Exit commodity charge will be required to offset under recovery of TO Exit allowed revenue."

National Grid View

- 5.43 The TO Exit Commodity charge has been proposed at this time such that a consistent NTS exit charging methodology, which would allow the recovery of TO exit allowed revenue irrespective of the level of booked capacity from 1st October 2012, can be defined. National Grid recognizes that this charge would not be required should baseline capacity sell out; however, this is not guaranteed. An over recovery mechanism might only be required as a consequence of material unforeseen levels of daily revenue resulting from the daily exit capacity auctions. This should be significantly less likely than under recovery. Notwithstanding this view, National Grid will seek industry views on the development of a TO exit over recovery mechanism through the TCMF prior to the first daily auctions in October 2012.

These arrangements are implemented with effect from 1 April 2009.

Respondents Views

- 5.44 SP "agree that these arrangements are implemented with effect from 1st April 2009". This view is supported by SGN and Centrica.
- 5.45 NGGD "support implementation from 1st April 2009 but consider that information on the price stability of the methodology should be provided prior to then. We would also highlight that it is essential, for the DN regulatory incentive, that NTS indicative prices for gas year N+4 are published in the NTS Gas Transportation Statement by 1st May at the latest within year N, e.g. by 1st May 2009 for Gas Year 2012/13."
- 5.46 AEP "support implementation in this timescale so that indicative prices for the enduring period can be issued with sufficient notice prior to the initial application window. However following the implementation of GCM12 it is not clear whether implementation of GCM05 from 1 April this year could result in the introduction of a TO commodity charge should there be an under-recovery of exit charges."

National Grid View

- 5.47 National Grid welcomes support for this aspect of the proposal and is progressing GCM05 on a timescale such that indicative prices based on an approved methodology can be generated for 1st May 2009.

Other Issues raised by the Consultation

Indicative Prices & User Commitment

Respondents Views

- 5.48 “Centrica generally supports the proposed amendments to the charging methodology although we have concerns over wording of paragraph 4.13. We believe that the user commitment should be defined in terms of a number of years [4] at the prevailing prices, whether or not there is a price control boundary these will be unknown at the time of entering into the commitment. At times there will be a need to generate the indicative prices by rolling forward the prevailing price controls but the indicative prices are only required in order to determine a default financial user commitment. “
- 5.49 RWE comments “The first bullet point in paragraph 4.23 refers to indicative prices being required for the initial application period for Enduring Annual NTS Exit (Flat) Capacity in gas year N-4. However Users can also apply for enduring capacity in the July 2009 window for gas years N-5 and N-6 and so these later years should also be referred to in this bullet point. We assume that indicative prices for gas years N-5 and N-6 will be calculated using the same gas year network model as those indicative prices for gas year N-4 (and so will be identical), but this should be made clear in the proposal.”

National Grid View

- 5.50 Indicative prices are being produced for three reasons; to inform Users decision making process prior to the application, to feed into the DN exit incentive calculation, and to feed into the User commitment process.
- 5.51 While the indicative prices will be generated in accordance with the charging methodology and may feed into the user commitment process, the User commitment process itself will be defined by the UNC and the Exit Capacity Release (ExCR) Methodology.

Supply & Demand Balancing

Respondents Views

- 5.52 “Centrica notes the section ‘Balancing S&D’ in paragraph 4.9. We believe that it is important that this is identified as a separate issue. While we would not support a smoothing which involves a reduction of all supplies we do believe that some form of smoothing of the storage and import supplies should be applied. The supply/demand balancing rules within the methodology and transportation model need to be reviewed in order to produce more stable prices whatever happens and certainly before the amendments proposed in GCM05 are implemented. Efforts should be made, where possible, to avoid unpredictable and unstable prices. Long term certainty in exit capacity prices is important for large users such as power stations. “

National Grid View

- 5.53 National Grid has issued charging methodology document NTS GCD 06 to identify and develop appropriate changes to the Charging Methodology which might improve price stability.
- 5.54 The Charging Methodology defines the calculation process for generating actual and indicative prices as required by the UNC and by the Licence defined capacity release methodology statements. The requirement for indicative prices will be defined within these documents and not the Charging Methodology statement.

Further Proposals

Respondents Views

- 5.55 “Centrica notes that by setting the exit prices such that sale of baseline capacity recovers allowed revenue it is extremely unlikely that the actual revenue will exceed the allowed revenue, such that a negative TO Exit Commodity Charge would be required. In the event that this does occur, however, it is important firstly that it is applicable to all exit flows, including those using short-haul commodity rates and secondly that it is not greater in magnitude than the SO Exit Commodity Charge at any time. If this is required then a separate consultation is needed.
- 5.56 Centrica has “concerns with regard to the uncertainty which the whole Exit Reform package, including the charging methodology, gives to the actual level of booking of exit capacity. We would suggest that if the actual level of bookings turns out to be substantially lower than the baseline then there will be a need to revise the charging methodology in order ensure that most of the revenue is collected through capacity charges. “

National Grid View

- 5.57 National Grid agrees that by setting the exit prices such that sale of baseline capacity recovers allowed revenue, it is extremely unlikely that the actual revenue will exceed the allowed revenue. It is for this reason, combined with the intended review of optional (short-haul) commodity charging arrangements that no over recovery proposals have been raised at this time.
- 5.58 Recognising the comments made by Ofgem in regard to entry and exit consistency in the GCM12 decision letter, this is an area that National Grid will be keeping under review.

Summary of Responses by Relevant Objectives

Cost Reflectivity

Respondents Views

- 5.59 EDF “believe that the proposal as it stands represents a reasonable and pragmatic solution to the issues that NGG has identified with regards to the setting of NTS Exit Capacity charges.”
- 5.60 EDF note that “Using baseline capacity rather than booked capacity to develop charges is cost reflective. In particular we would note that it is the cost of providing the baseline capacity that NGG is seeking to recover and not the level of booked capacity, which could vary.”
- 5.61 EDF note that “Offpeak capacity should be released through auctions with a zero reserve price. In particular we would note that the offpeak product is designed to release capacity required to meet peak 1 in 20 demand that is not utilised other than at times of peak demand. The cost of this capacity will have been recovered through firm charges and so no additional costs will be incurred in providing this capacity.”
- 5.62 EDF note that “The use of a TO Commodity charge should help to ensure that costs are targeted at those who are currently incurring them, although we would note that these costs will now only be targeted at exit points, whilst under the current arrangements they are targeted at entry and exit. To this end therefore this proposal would appear to be more cost reflective.”

- 5.63 EDF note that “Whilst we do not support the commoditisation of a capacity charge in general, we would note that in these circumstances it appears to be a reasonable and pragmatic solution to the issue. The only other solution would be to increase the firm capacity charges, however we agree with NGG that this could create an additional incentive to not book firm capacity and were this to reach a critical point would result in a flight from firm capacity. In the very long term this may benefit consumers if the cost of the NTS was to decrease as a result of lower investment.”
- 5.64 EON notes “Unfortunately the analysis in the GCM05 paper doesn’t in our view consider real cost reflectivity and instead seems to focus on the labels that happen to be placed on different pots of money National Grid is allowed to recover under its Licence. Whether activities are deemed to be TO or SO, do or do not form part of an agreed baseline are not necessarily relevant to the setting of cost reflective charges. “
- 5.65 EON comments “A reasonable cost reflective principle is to assume that fixed costs should be recovered through capacity charges and variable costs through commodity charges. This concept is well understood in the analysis that led to the recent implementation of new levels of capacity and commodity charges under the charging methodologies for gas distribution networks. It is true that activities that are categorised as TO will be predominantly fixed and those that are considered to be SO are likely to be variable, but TO should not be used as a shorthand for fixed cost nor should SO be used to relate to variable costs.”
- 5.66 EON comments “It is also important to understand that the Off-Peak Daily NTS (Flat) Exit Capacity service has been design to use spare capacity that may be available on the network. As such shippers that use this service would not be expected to drive investment in the transmission system and it is these costs that make up lion’s share of fixed cost. In evidence to the Competition Commission in relation to the UNC 116V and UNC 116A appeal (see attachment A) we demonstrated that at least 81% of exit capacity costs were fixed and some no more than 19% were variable. At the time about a third of costs were recovered from commodity so it can be argued that even existing interruptible users pay more than they should. The suggested proposals would shift even more costs onto Off-Peak users (for a lower quality service) and this is entirely inconsistent with the marginal pricing principles that this analysis. We would therefore regard that aspects of this proposal run counter to the principles for network access tariffs set out in EC Regulation 1775/2005.”
- 5.67 EON comments “The ‘revenue forgone’ concept is also rather confusing. Either National Grid is allowed to recover revenue or it is not. The statement “increase in SO allowed revenue is cancelled out by an effective reduction in TO allowed exit revenue” seems particularly irrelevant. Why should a change to the label applied to a particular cost drive a fundamental change in the charging methodology – this is illogical.”
- 5.68 EON comments “In reality the revenue foregone concept seems to be one of giving National Grid allowed revenue for past “over-investing” in its system. Allowing this revenue may be appropriate if it was based on reasonable assumptions at the time, but it is certainly not something that it is right to ‘blame’ future Off-Peak capacity users for. Let us remember that this service is only available when spare capacity is available and there is no limit on the number of days that it may be interrupted. The availability Off-Peak capacity is also likely to reduce over time with the eventual move to nodal capacity release and National Grid seek make better use of any slack in parts of the system. We also do not expect that there would be a ‘flight to firm’ as seems to be suggested.”

- 5.69 EON “consider that firm capacity charges should be set to recover the firm exit capacity costs and that the commodity charges should be set to recover exit variable costs. Overall these proposals appear to introduce charges that are likely to be less cost-reflective than the current arrangements. We therefore do not believe it is appropriate for National grid to pursue many of the GCM05 changes at this time. We would therefore urge Ofgem to veto it if GCM05 goes forward in its current form.”

National Grid View

- 5.70 As a consequence of the implementation of UNC 0195AV, National Grid is obliged to make baseline Exit (flat) Capacity available and has sought to price this product in a cost reflective manner. The baseline exit capacity level reflects the exit capability of the transmission system and hence National Grid is seeking to recover transmission system owner TO Exit allowed revenue, i.e. the costs incurred, through the sale of the baseline level of this product. One of the consequences of this approach is that capacity prices are independent of the actual level of exit capacity sales, as is the case with entry capacity. This increases capacity price stability and predictability.
- 5.71 If National Grid had priced the Exit (Flat) Capacity product to recover TO Exit allowed revenue, i.e. the costs incurred in making all exit capacity available, through the sale of the booked capacity quantity only, then prices would have been more variable and less predictable.
- 5.72 National Grid believes that recovering fixed costs through capacity charges and, by default, variable costs through commodity charges is an over simplification. National Grid believes that only those fixed costs that can be allocated locationally should be recovered through capacity charges and fixed and variable costs that cannot be efficiently targeted locationally, or to the provision of a specific product, should be commoditised. National Grid believes that this is consistent with its obligations to develop a cost reflective charging methodology.
- 5.73 National Grid continues to believe that the Transportation Model approach generates cost reflective capacity charges as it relies on investment costs, flow direction and distances travelled which are the fundamental drivers for transportation costs. National Grid believes that the charging methodology changes identified for exit reform retain the prevailing level of cost reflectivity and hence achieve the relevant objective. This can be demonstrated by comparing the indicative ‘as-is’ prices based on the prevailing methodology and the retention of revenue foregone with the indicative GCM05 prices as outlined in Appendix B – Indicative NTS Exit (Flat) Capacity Prices.

Taking Account of Developments within the Transportation Business**Respondents Views**

5.74 RWE comments “Following Ofgem’s approval of Modification Proposal 195AV, which requires National Grid to release zero reserve priced nodal off peak exit capacity up to each NTS Exit Point’s maximum daily offtake capability (on all but high demand days), it would now seem appropriate to base NTS Exit (Flat) Capacity charges on the baselines specified in National Grid’s licence rather than on Enduring and Annual Capacity bookings (as originally proposed). The combination of lower SO Commodity Charges (brought about by the removal of NTS Charges foregone) and the greater certainty of off peak availability could well increase the attractiveness of off-peak exit capacity compared to firm exit capacity. This could see a reduced uptake of Enduring/ Annual/Daily NTS Exit (Flat) Capacity and perennial increases in firm charges, so setting NTS Exit (Flat) Capacity prices based on baselines breaks this linkage and should make prices more stable, albeit at the likely expense of under recovery in allowed TO Exit revenue. Whilst baselines currently seem to represent the most appropriate basis for determining exit capacity charges this should be kept under review, particularly in light of the fact that baselines may be fundamentally changed in the next NTS price control (as they were at entry) or as a consequence of National Grid complying with its Exit revision methodology statement.”

National Grid View

5.75 National Grid has brought forward a proposal that generates nodal prices, removes interruption payments and links prices to exit baselines as a direct consequence of the implementation of UNC 0195AV and the licence implications of exit reform. For this reason, National Grid believes that this proposal appropriately takes into account changes within the Transportation business and hence achieves the relevant objective.

6 Changes to the Original Proposal in light of Representations Made

- 6.1 National Grid believes that no changes to the proposal are required in light of responses and questions raised throughout the **GCM05** re-consultation process; however, clarifications are made in regard to the following points.

Baseline & Incremental Capacity

- 6.2 RWE “assume that any incremental capacity signalled above baseline will not be included in the overall level of baseline exit capacity on which exit capacity charges are based until the fifth anniversary of its release, as until that time it counts towards SO allowed revenue. If this is the case this should be clearly spelt out in the revised charging methodology. The charging methodology should also specify whether such arrangements apply when incremental capacity is satisfied by way of exit capacity substitution.”
- 6.3 The Licence and baseline statement will cover the management of baseline and incremental obligated exit capacity. RWE’s assumptions are consistent with National Grid’s understanding of the baseline management process.

Charging Timeline

- 6.4 RWE comments “It is not clear from the second bullet point in paragraph 4.23 whether prices for annual capacity in gas years N-2 and N-3, published prior to an application window in gas year N, will be indicative or actual. We assume the former, as this is consistent with how enduring prices are charged and should be most cost reflective, but the proposal needs to make this clear. “
- 6.5 Appendix D - Timelines outlines when indicative and actual prices are generated in relation to all application and auction processes. This can be incorporated into the charging methodology statement.

Transportation Model

- 6.6 RWE comments “Currently National Grid release transportation models around July each year for gas years N-1, N-2 and N-3. We assume in future that National Grid will, at the same time as they issue indicative prices, now release transportation models out to gas year N-4 (or gas year N-6 if our assumptions in point 4 above are incorrect). This needs to be made clear in the proposal.”
- 6.7 National Grid will endeavour to release copies of the Transportation Models to registered users including those used to generate indicative and actual exit prices; however, there may be confidentiality issues associated with the data used for indicative prices prior to the initial application if all new exit points have not been included within the Licence. National Grid will further investigate this issue.

7 Final Proposal

GCM05: National Grid proposes through this document that:

- A consistent approach to the setting of actual, indicative and auction reserve prices for NTS Exit (Flat) Capacity is taken
- Nodal, offtake specific, NTS Exit (Flat) Capacity prices are set
- Interruption credits are removed from the NTS Charging Methodology
- The Transportation Model is used for estimating Long Run Marginal Costs (LRMCs) for the purposes of determining Annual/Enduring Annual NTS Exit (Flat) Capacity prices and reserve prices for daily firm NTS Exit (Flat) Capacity auctions based on a single year network model and supply/demand data for the relevant Gas Year;
 - For Annual/Enduring Annual NTS Exit (Flat) Capacity, actual prices (p/kWh/day) will be set for the forthcoming Gas Year based on the supply data, baselines, obligated entry capacity and network model for that year;
 - For Daily NTS Exit (Flat) Capacity, the reserve price will be set at the Annual/Enduring Annual NTS Exit (Flat) Capacity price in place for that Gas Day.
 - For Off-Peak Daily NTS Exit (Flat) Capacity auctions, the reserve price will be zero.
- Defined inputs to the Transportation Model
 - Network ~ the network model comprising the nodes and pipe lengths would represent the Year of capacity release. The model would represent committed projects as indicated by the Ten Year Statement. Where network models are generated for indicative prices for the first application, sufficient pipe to allow connection of all new entry and exit points would be included.
 - Supply Data ~ Ten Year Statement (No Change)
 - Supply Balancing ~ Merit order (No Change ~ subject to review)
 - This proposal is based on the prevailing methodology; a merit order approach, where supplies are used one-by-one to reach the modelled demand level. If supplies are insufficient to meet demand, Interconnector forecast flows are increased up to capability to achieve a supply & demand match. Any charging methodology change brought forward in this area to change the prevailing exit charging methodology would then apply to the enduring charging methodology.
 - Demand Data ~ flow data will be based on Baseline and obligated incremental exit capacity levels other than bi-directional system points which will be assumed to be in supply mode and hence will have a zero exit flow. Capacity data will be the baseline quantities. Sites representing incremental capacity release will have the capacity level (but not the flow level) capped at the baseline level as this is the level of capacity that represents TO revenue; capacity in excess of this level represents SO revenue.

- Target revenue ~ TO exit target revenue calculated in accordance with the Charging Methodology and NTS Licence (No Change)
- Expansion factor ~ calculated in gas year N-4 based on the costs of constructing NTS capacity for 1st October in gas Year N. (e.g. the expansion factor for gas year starting 1st October 2012 would be set in the summer of 2009 and would apply for setting prices for all applications and auctions for gas year starting 1st October 2012 including daily auctions)
- Anuitisation factor ~ Implied by the NTS Licence (allowed rate of return, operating expenditure allowance and anuitisation period) at the time of setting prices. (No Change)
- The NTS (Flat) Commodity charge rate would be determined from a combination of SO & TO charges
 - The SO NTS Exit (Flat) Commodity charge maps onto and replaces the existing SO NTS Exit Commodity charge.
 - A new TO Exit (Flat) Commodity charge is introduced in addition to the SO Exit (Flat) Commodity charge
 - The level of the TO Exit (Flat) Commodity charge would be set to seek to adjust the level of TO collected exit revenue if there is forecast to be under recovery.
 - The NTS TO Exit (Flat) Commodity charge will have an identical structure and application to the NTS SO Exit (Flat) Commodity charge

Implementation

It was proposed that these arrangements would be implemented with effect from 1st April 2009. Implementation of UNC 0195AV requires an initial application in the summer of gas year N for capacity from 1st October in gas year N+4 e.g. summer 2009 for gas year starting 1st October 2012. As a consequence a phased implementation would be required as indicated by the timelines in Appendix D - Timelines.

Indicative Prices

Indicative capacity and commodity prices are included in Appendix B – Indicative NTS Exit (Flat) Capacity Prices and Appendix C – Indicative NTS Exit (Flat) Commodity Prices.

Future Proposals

Further proposals might be required to cover NTS TO Exit over recovery as a consequence of revenue from daily exit capacity auctions. Over recovery might be managed by a reduced or negative TO Exit Commodity Charge however National Grid's reasonable endeavours obligation to only set commodity charges twice a year on 1st April and 1st October might not be sufficiently flexible. It may be more appropriate to investigate rebate mechanisms consistent with those introduced for NTS TO Entry revenue over recovery.

8 How the Proposed Modification Achieves the Relevant Objectives

Assessment against Licence Objectives

- 8.1 The National Grid plc Gas Transporter Licence in respect of the NTS requires that proposed changes to the NTS Charging Methodology shall achieve the relevant methodology objectives.
- 8.2 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.
- 8.3 National Grid believes that GCM05 would achieve the relevant objectives.
- 8.4 The prices generated from the Transportation Model are reflective of both the costs that have been incurred in making physical system capacity available (through the assumptions in the Expansion Constant) and the actual marginal costs that would be incurred by capacity release relative to the prevailing system capacity. Calculating prices on a single year analysis with a Transportation Model will therefore result in Users paying differentially for the capacity they hold and potentially use during the relevant Gas Year.
- 8.5 Commoditising the TO costs associated with unsold baseline capacity should ensure that these costs are recovered from all Shippers in relation to all consumers and hence those utilising off-peak capacity, which will in part be facilitated by unsold baseline capacity, will attract a more appropriate level of TO costs.
- 8.6 It is National Grid's view that the objective of NTS Exit (Flat) Capacity prices is to provide price signals to Users in relation to the relative cost associated with providing capacity at different locations around the network. The advantage of the proposed Tariff model approach, where exit prices are adjusted (additive), is that it preserves the locational price differentials between Exit points and hence preserves the relative cost-reflectivity. Adjusting prices based on baseline capacity will also ensure that costs are not subject to the level of capacity booking and hence are more stable.
- 8.7 It is National Grid's view that competition can be promoted in terms of the development of the NTS Charging Methodology by making it simple and easy to understand such that prices can be replicated and forecast by Users. The Transportation Model has significant benefits in term of transparency and predictability. Using a single year model allows the prices for the remaining years of the ten year plan to be forecast by both National Grid and the wider industry. It is anticipated that this feature of the methodology would give greater confidence to Users and reduce risk associated with price uncertainty hence promoting competition and reducing barriers to entry.
- 8.8 National Grid believes the use of the Transportation Model allows it to make consistent estimates of LRMCs and therefore avoid undue preference in capacity pricing. The single charging model also allows both National Grid and Users to easily make quick assessments of the value of capacity, therefore enabling the user to make informed decisions about purchasing capacity.

Assessment against EU Gas Regulations

8.9 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.

8.10 National Grid believes that GCM05 is consistent with the principles listed above.

Appendix A – Licence Implications of Exit Reform

Interruptible supply points do not currently attract NTS Exit Capacity charges. Within the Licence, 'Charges Foregone' relates to those revenues equal to the NTS Exit Capacity charges that Interruptible supply points would pay if they were Firm.

Charges Foregone are (up to exit reform) included within the NTS Licence as SO allowed revenue and as TO actual (collected) revenue i.e. an increase in SO allowed revenue is cancelled out by a net reduction in TO allowed exit revenue. The effect of this is to move the allowed revenue from the TO control to the SO control.

Post Exit Reform there would be no 'Charges Foregone'. In theory this means that NTS Exit (Flat) Capacity charges could remain unchanged, if all 'interruptible' demand converted to firm, with a consequential decrease in SO Commodity charges. This would be as a consequence of the increased allowed TO revenue, as a result of the removal of Charges Foregone, being offset by the increased collected revenue from those exit points that were previously interruptible.

There are further consequences of exit reform within the Licence with the "Buy-back and interruptions incentive" being replaced by the "Exit investment buyback incentive". These can be mapped to the removal of the interruption credits to be replaced by bi-lateral contracting and direct payment for interruption.

The remainder of the Licence changes allow for NTS Exit Capacity to be replaced by NTS Exit (Flat) Capacity and NTS Exit (Flexibility) Capacity.

Allowed Revenue

- ◆ SO exit incentives, costs and revenues (SOExIRct) includes:
 - ◆ Buy-back and interruptions incentive (ExCBBIRt) **(only until exit reform)**;
 - ◆ Constrained LNG target (ExCITt);
 - ◆ Exit capacity investment incentive (ExCIIRt);
 - ◆ Long run contracting incentive costs and revenue (ExLRCIRt);
 - ◆ Non-obligated exit capacity revenue (ExNOCIRt) **(only after exit reform)**;
 - ◆ Exit investment buyback incentive (ExXSIBBct) **(only after exit reform)**;
 - ◆ Allowance for 'charges foregone' (ExNTSSICt) **(only until exit reform)**

Actual Revenue

- ◆ SO Exit Capacity actual revenue (SOExRFt)
 - ◆ Until Exit Reform
 - ◆ SO revenue from charges levied with regards provision of exit capacity above baseline ~ total charges – baseline charges (TOExt-TOExRFt)
 - ◆ Enduring
 - ◆ SO revenue from charges levied with regards provision of
 - ◆ obligated incremental NTS Exit flat capacity (REVOIExCt)
 - ◆ obligated incremental NTS Exit flow flex capacity (REVOIFFt)
 - ◆ non-obligated incremental NTS Exit flat & flow flex capacity & short term interruptible (ExREVNOct)

- ◆ **TOExRt = TOExRFt + ExNTSSICt + TORREVBExCt**
- ◆ TO Exit actual revenue (TOExRt) equals:
 - ◆ TO revenue from sale of exit baseline capacity (**until exit reform**) (TOExRFt)
 - ◆ **Plus**
 - ◆ TO Exit capacity 'charges foregone' (**until exit reform**) (ExNTSSICt)
 - ◆ **Plus**
 - ◆ TO revenue from sale of NTS exit flat & flow flexibility baseline capacity (**enduring**) (TOREVBExCt)

Appendix B – Indicative NTS Exit (Flat) Capacity Prices

These indicative exit prices, updated from the original GCM05 consultation, are based on the proposed methodology and should not be used for any other purpose. The impact of the removal of revenue foregone on the SO Commodity charge would be a reduction of 0.0028 p/kWh for 2012/13 based on the data used for the indicative capacity charges.

The following Transportation Model inputs have been used:

Input	Value
Network	2012/13
Supply	December 2008 Ten Year Statement for 2012/13
Demand	<p>'As-is' ~ 2008 Forecast 'Firm' Demand for 2012/13</p> <p>'Baseline' ~ Licence exit baseline quantities</p> <p>In both cases no exit flow is modelled for storage, or for IUK</p>
Balancing S&D	Merit Order – storage flows have been increased to offset increased demand due to the inclusion of previously 'interruptible' demand in the 'baseline' scenario
Expansion Factor	1 st October 2008 - £2320/GWhkm (The Expansion Factor for October 2012/13 will be set in spring 2009)
Anuitisation Factor	0.10272

Indicative NTS Exit (Flat) Capacity prices have been generated as follows:

Scenario	Demand in Node Data Table in Transportation Model (Column P)	Exit Capacity in Administered Exit Charges Table in Transportation Model (Column AD)	Target TO Exit Revenue
As-Is	<p>Forecast Firm Demand</p> <p><i>Total Demand: 6213 GWh</i></p>	<p>Forecast Firm Baseline Capacity booked</p> <p>- IUK Exit Capacity modelled at prevailing firm level</p> <p><i>Total TO Capacity: 5984 GWh³</i></p>	<p>£243.4m</p> <p>(£61.6m Revenue Foregone collected through SO Commodity Charge)</p>
Baseline	<p>Demand modelled as baseline plus incremental other than bi-directional exit points which are modelled as supplies</p> <p><i>Total Demand: 7490 GWh</i></p>	<p>Baseline Capacity</p> <p><i>Total TO Capacity: 8626 GWh</i></p>	<p>£305.0m</p>

³ The TO Exit Capacity figure is less than the demand as incremental exit capacity has been included as a demand but not as capacity. This is because incremental capacity is treated as SO revenue and hence should not be used in the process of adjusting charges to collect TO allowed revenue.

Indicative NTS Exit (Flat) Capacity Charges by Exit Point (p/kWh/day) 1st October 2012

Exit Point	DC/DN	Indicative Exit Charge (p/kWh/day)	
		As-Is	Baseline
AM_PAPER	DC	0.0163	0.0168
AVONMOUTH_LNG	DC	0.0237	0.0205
BACTON INTERCONNECTOR	DC	0.0004	0.0005
BAGLAN_BAY_PG	DC	0.0072	0.0073
BARKING_PG	DC	0.0124	0.0126
BARRINGTON	DC	0.0269	0.0271
BARTON_STACEY_(MRS)	DC	0.0223	0.0224
BILLINGHAM_ICI	DC	0.0083	0.0068
BP_GRANGEMOUTH	DC	0.0001	0.0001
BP_SALTEND_HP	DC	0.0001	0.0001
BRIDGEWATER_PAPER	DC	0.0204	0.0221
BRIGG_PG	DC	0.0038	0.0057
BRIMSDOWN_PG	DC	0.0138	0.0139
BRUNNER_MOND	DC	0.0178	0.0180
CAYTHORPE_(MRS)	DC	0.0008	0.0001
CENTRAX	DC	0.0324	0.0324
CHESHIRE_(MRS)	DC	0.0174	0.0175
CONNAHS_QUAY_PS	DC	0.0201	0.0225
CORBY_PS	DC	0.0103	0.0104
CORYTON_PG	DC	0.0127	0.0128
COTTAM_PG	DC	0.0047	0.0048
DAMHEAD_CREEK	DC	0.0121	0.0122
DEESIDE_PS	DC	0.0204	0.0222
DIDCOT_A	DC	0.0187	0.0190
DIDCOT_PS	DC	0.0188	0.0189
DYNEVOR_ARMS_LNG	DC	0.0088	0.0089
EASINGTON&ROUGH_TERMINAL	DC	0.0001	0.0001
ENRON_(BILLINGHAM)	DC	0.0083	0.0068
FLEETWOOD_(MRS)	DC	0.0141	0.0147
FLEETWOOD_OT	DC	0.0141	0.0147
GARTON_(MRS)	DC	0.0001	0.0001
GLENMAVIS_LNG	DC	0.0001	0.0001
GOOLE_GLASS	DC	0.0028	0.0029
GRAIN_GAS	DC	0.0121	0.0122
GREAT_YARMOUTH	DC	0.0004	0.0005

Exit Point	DC/DN	Indicative Exit Charge (p/kWh/day)	
		As-Is	Baseline
HATFIELD_MOOR_(MRS)	DC	0.0034	0.0035
HAYS_CHEMICALS	DC	0.0189	0.0191
HOLEHOUSE_FARM_(MRS)	DC	0.0192	0.0193
HORNSEA_(MRS)	DC	0.0001	0.0001
ICI_RUNCORN	DC	0.0221	0.0222
IMMINGHAM_PG	DC	0.0001	0.0001
KEADBY_PS	DC	0.0039	0.0040
KEMIRAINCE_CHP	DC	0.0218	0.0219
KINGS_LYNN_PS	DC	0.0056	0.0057
LANGAGE_PG	DC	0.0351	0.0352
LITTLE_BARFORD_PS	DC	0.0118	0.0119
LONGANNET	DC	0.0001	0.0001
MARCHWOOD	DC	0.0240	0.0241
MEDWAY_PS	DC	0.0120	0.0123
MOFFAT	DC	0.0009	0.0015
PARTINGTON_LNG	DC	0.0188	0.0185
PEMBROKE_PG	DC	0.0001	0.0001
PETERBOROUGH_PS	DC	0.0075	0.0086
PETERHEAD_PG	DC	0.0001	0.0001
PHILLIPS_SEAL_SANDS	DC	0.0076	0.0062
PORTLAND_(MRS)	DC	0.0280	0.0241
ROCKSAVAGE_PG	DC	0.0221	0.0222
ROOSECOTE_PS	DC	0.0072	0.0080
RYE_HOUSE_PS	DC	0.0142	0.0143
SALTEND	DC	0.0001	0.0001
SAPPAPAPERMILLCHP	DC	0.0152	0.0158
SEABANK_POWER	DC	0.0220	0.0221
SEABANK_POWER_II	DC	0.0237	0.0205
SELLAFIELD_PS	DC	0.0053	0.0117
SEVERNSIDE_ICI	DC	0.0236	0.0205
SHOTTON_PAPER	DC	0.0202	0.0224
SPALDING_PG	DC	0.0060	0.0061
STALLINGBOROUGH_PS	DC	0.0007	0.0008
STAYTHORPE	DC	0.0074	0.0076
SUTTON_BRIDGE_PS	DC	0.0069	0.0070
TEESSIDE_BASF	DC	0.0077	0.0062
TEESSIDE_HYDROGEN	DC	0.0077	0.0062

Exit Point	DC/DN	Indicative Exit Charge (p/kWh/day)	
		As-Is	Baseline
THORNTON_CURTIS_PG	DC	0.0001	0.0001
ZENECA	DC	0.0083	0.0068
BACTON_OT	EA	0.0004	0.0005
BRISLEY	EA	0.0031	0.0032
GREAT_WILBRAHAM	EA	0.0082	0.0083
MATCHING_GREEN	EA	0.0129	0.0130
PETERBOROUGH_TEE	EA	0.0080	0.0081
ROUDHAM_HEATH	EA	0.0046	0.0048
ROYSTON	EA	0.0099	0.0100
WEST_WINCH	EA	0.0053	0.0054
WHITWELL	EA	0.0117	0.0119
YELVERTON	EA	0.0026	0.0027
ALREWAS_EM	EM	0.0156	0.0157
BLABY	EM	0.0123	0.0124
BLYBOROUGH	EM	0.0047	0.0048
CALDECOTT	EM	0.0100	0.0101
DROINTON_OT	EM	0.0166	0.0167
GOSBERTON	EM	0.0057	0.0058
KIRKSTEAD	EM	0.0037	0.0038
MARKET_HARBOROUGH	EM	0.0111	0.0112
SILK_WILLOUGHBY	EM	0.0049	0.0050
SUTTON_BRIDGE	EM	0.0070	0.0071
THORNTON_CURTIS_LDZ	EM	0.0001	0.0001
TUR_LANGTON	EM	0.0113	0.0114
WALESBY	EM	0.0014	0.0015
ASSELBY	NE	0.0023	0.0024
BALDESBY	NE	0.0072	0.0073
BURLEY_BANK	NE	0.0064	0.0065
GANSTEAD	NE	0.0001	0.0001
PANNAL	NE	0.0060	0.0061
PAULL	NE	0.0001	0.0001
PICKERING	NE	0.0033	0.0014
RAWCLIFFE	NE	0.0025	0.0026
TOWTON	NE	0.0044	0.0045
BISHOP_AUCKLAND	NO	0.0062	0.0067
COLDSTREAM	NO	0.0001	0.0001
CORBRIDGE	NO	0.0019	0.0025

Exit Point	DC/DN	Indicative Exit Charge (p/kWh/day)	
		As-Is	Baseline
COWPEN_BEWLEY	NO	0.0081	0.0066
ELTON	NO	0.0075	0.0056
GUYZANCE	NO	0.0001	0.0001
HUMBLETON	NO	0.0001	0.0001
KELD	NO	0.0082	0.0088
LITTLE_BURDON	NO	0.0073	0.0059
MELKINTHORPE	NO	0.0075	0.0081
SALTWICK	NO	0.0007	0.0013
THRINTOFT	NO	0.0089	0.0076
TOW_LAW	NO	0.0081	0.0086
WETHERAL	NO	0.0051	0.0057
HORNDON	NT	0.0124	0.0126
LUXBOROUGH_LANE	NT	0.0127	0.0128
PETERS_GREEN	NT	0.0121	0.0123
PETERS_GREEN_SOUTH_MIMMS	NT	0.0121	0.0123
WINKFIELD_NT	NT	0.0204	0.0205
AUDLEY_NW	NW	0.0200	0.0201
BLACKROD	NW	0.0162	0.0167
ECCLESTON	NW	0.0219	0.0220
HOLMES_CHAPEL	NW	0.0201	0.0202
LUPTON	NW	0.0107	0.0112
MALPAS	NW	0.0218	0.0219
MICKLE_TRAFFORD	NW	0.0212	0.0213
PARTINGTON	NW	0.0188	0.0186
SAMLESBURY	NW	0.0148	0.0154
WARBURTON	NW	0.0186	0.0187
WESTON_POINT	NW	0.0221	0.0222
ABERDEEN	SC	0.0001	0.0001
ARMADALE	SC	0.0001	0.0001
BALGRAY	SC	0.0001	0.0001
BATHGATE	SC	0.0001	0.0001
BROXBURN	SC	0.0001	0.0001
CARESTON	SC	0.0001	0.0001
DRUM	SC	0.0001	0.0001
GLENMAVIS	SC	0.0001	0.0001
HUME	SC	0.0001	0.0001
KINKNOCKIE	SC	0.0001	0.0001

Exit Point	DC/DN	Indicative Exit Charge (p/kWh/day)	
		As-Is	Baseline
LANGHOLM	SC	0.0028	0.0034
LAUDERHILL	SC	0.0001	0.0001
LOCKERBIE	SC	0.0020	0.0025
MOSSIDE	SC	0.0001	0.0001
NETHER_HOWCLEUGH	SC	0.0002	0.0008
PITCAIRNGREEN_OT	SC	0.0001	0.0001
SOUTRA	SC	0.0001	0.0006
ST_FERGUS_OT	SC	0.0001	0.0001
STRANRAER	SC	0.0009	0.0015
FARNINGHAM	SE	0.0144	0.0145
SHORNE	SE	0.0134	0.0135
TATSFIELD	SE	0.0160	0.0161
WINKFIELD_SE	SE	0.0204	0.0205
BRAISHFIELD_A_&_B	SO	0.0238	0.0239
HARDWICK	SO	0.0154	0.0155
IPSDEN	SO	0.0185	0.0186
IPSDEN_2	SO	0.0185	0.0186
MAPPOWDER	SO	0.0280	0.0241
WINKFIELD_SO	SO	0.0204	0.0205
AYLESBEARE	SW	0.0300	0.0301
CHOAKFORD	SW	0.0351	0.0352
CIRENCESTER	SW	0.0199	0.0201
COFFINSWELL	SW	0.0325	0.0327
EASTON_GREY	SW	0.0205	0.0206
EVESHAM	SW	0.0166	0.0167
FIDDINGTON	SW	0.0159	0.0160
ILCHESTER	SW	0.0260	0.0261
KENN	SW	0.0311	0.0312
LITTLETON_DREW	SW	0.0212	0.0213
PUCKLECHURCH	SW	0.0220	0.0221
ROSS_SW	SW	0.0133	0.0134
SEABANK_LDZ	SW	0.0238	0.0206
ALREWAS_WM	WM	0.0156	0.0157
ASPLEY	WM	0.0184	0.0185
AUDLEY_WM	WM	0.0200	0.0201
AUSTREY	WM	0.0149	0.0150
LEAMINGTON_SPA	WM	0.0141	0.0142

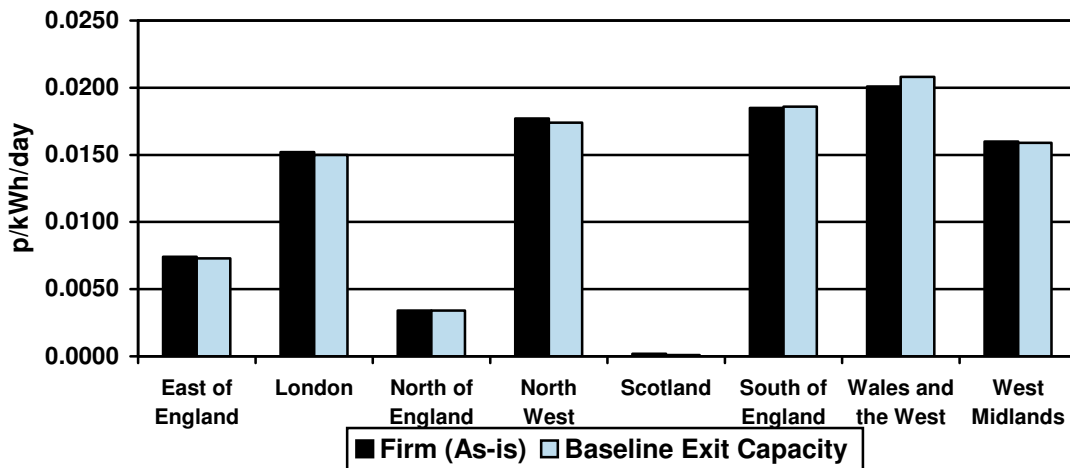
Exit Point	DC/DN	Indicative Exit Charge (p/kWh/day)	
		As-Is	Baseline
LOWER_QUINTON	WM	0.0159	0.0160
MILWICH	WM	0.0172	0.0173
ROSS_WM	WM	0.0133	0.0134
RUGBY	WM	0.0131	0.0132
SHUSTOKE	WM	0.0160	0.0161
STRATFORD_UPON_AVON	WM	0.0154	0.0155
MAELOR	WN	0.0225	0.0227
DOWLAIS	WS	0.0094	0.0095
DYFFRYN_CLYDACH	WS	0.0074	0.0075
GILWERN	WS	0.0105	0.0106

Indicative NTS Exit (Flat) Capacity Charges Averaged by Exit Zone (p/kWh/day) 1st October 2012

For comparison with prevailing NTS Exit Capacity prices only, the following table shows indicative NTS Exit (Flat) Capacity prices generated on a flow weighted average NTS exit zone basis, in accordance with the prevailing methodology for setting charges for DN exit points. National Grid anticipates that DNOs would bring forward DN Charging Methodology proposals as required to pass these costs on to Shippers. There is the potential for NTS exit zones to be retained within the DN Charging Methodology.

Area	Zone	Average Indicative Exit Charge (p/kWh/day) by NTS Exit Zone	
		As-Is	Baseline
East of England	EA1	0.0064	0.0064
	EA2	0.0073	0.0066
	EA3	0.0027	0.0026
	EA4	0.0123	0.0122
	EM1	0.0001	0.0001
	EM2	0.0050	0.0049
	EM3	0.0147	0.0148
	EM4	0.0106	0.0105
North of England	NE1	0.0055	0.0054
	NE2	0.0005	0.0010
	NE3	0.0001	0.0001
	NO1	0.0048	0.0053
	NO2	0.0060	0.0054
London	NT1	0.0205	0.0204
	NT2	0.0128	0.0126
	NT3	0.0123	0.0121
North West	NW1	0.0158	0.0154
	NW2	0.0196	0.0194
Scotland	SC1	0.0001	0.0001
	SC2	0.0002	0.0001
	SC4	0.0002	0.0002
South of England	SE1	0.0153	0.0152
	SE2	0.0205	0.0204
	SO1	0.0155	0.0154
	SO2	0.0226	0.0233
Wales and the West	SW1	0.0158	0.0157
	SW2	0.0220	0.0231
	SW3	0.0309	0.0331
	WN	0.0227	0.0225
	WS	0.0093	0.0094
West Midlands	WM1	0.0186	0.0185
	WM2	0.0155	0.0154
	WM3	0.0140	0.0139

The following graph shows the average offtake prices by Distribution Network in order to show the geographic impact on prices. The marked change in prices for Wales and the West is due to the large change in supplies at Avonmouth required to meet the increased demand for Baseline flow levels. Under the prevailing NTS Charging Methodology, supplies are matched to demand using a merit order which appears to make exit charges nearest the supplies at the top of the merit order most variable. National Grid has committed to investigate alternative supply and demand balancing options to seek to make exit charges more stable and to bring forward NTS Charging Methodology proposals as required. As this proposal is based on the prevailing charging methodology, any changes to the balancing approach used to set exit charges would be for both the prevailing arrangements and the enduring offtake arrangements.



Appendix C – Indicative NTS Exit (Flat) Commodity Prices

The following table demonstrates the impact on the proposed TO Exit (Flat) Commodity charges from 1st October 2012 based on a number of firm booking scenarios.

Allocated Annual exit Capacity Scenarios	Annual Capacity Sold	Unsold Baseline	TO Revenue Shortfall		TO Exit Commodity Charge
	(GWh/day)	(GWh/day)	(£m)	(%)	(p/kWh)
Firm (As-is)	5,984	2,643	£61.60	19.09%	0.0056
Firm + DN Interruptibles	6,247	2,380	£55.47	21.78%	0.0050
Firm + DC Interruptibles	7,160	1,467	£34.19	10.95%	0.0031
Firm + DC & DN Interruptibles	7,350	1,227	£28.06	7.43%	0.0025
Baseline Exit Capacity	8,627	0	£0.00	0.00%	0.0000

Appendix D - Timelines

The following tables show the build up of prices required for the 1st October 2012 capacity release date and the first application period summer 2009. In each year, starting from 2009, the prices that would be generated are shown.

Key
Actual prices or reserve prices
Indicative Prices

Timeline Example 2009 –Applications

Gas Year Modelled	Used For	Gas Day - Capacity		Application Window / Date Auction(s) Held
		From	To	
2012/13	INDICATIVE Enduring Annual NTS Exit (Flat) Capacity	1 Oct 2012	-	Summer 2009 Application Window
		1 Oct 2013	-	
		1 Oct 2014	-	

Timeline Example 2010 –Applications

Gas Year Modelled	Used For	Gas Day - Capacity		Application Window / Date Auction Held
		From	To	
2012/13	Annual NTS Exit (Flat) Capacity	1 Oct 2012	30 Sep 2013	Summer 2010 Application Window
2013/14	INDICATIVE Enduring Annual NTS Exit (Flat) Capacity	1 Oct 2013	-	Summer 2010 Application Window
		1 Oct 2014	-	
		1 Oct 2015	-	

Timeline Example 2011 –Applications

Gas Year Modelled	Used For	Gas Day - Capacity		Application Window / Date Auction Held
		From	To	
2012/13	Annual NTS Exit (Flat) Capacity	1 Oct 2012	30 Sep 2013	Summer 2011 Application Window
2013/14	Annual NTS Exit (Flat) Capacity	1 Oct 2013	30 Sep 2014	Summer 2011 Application Window
2014/15	INDICATIVE Enduring Annual NTS Exit (Flat) Capacity	1 Oct 2014	-	Summer 2011 Application Window
		1 Oct 2015	-	
		1 Oct 2016	-	

Timeline Example 2012 – Auctions/Applications

Gas Year Modelled	Used For	Gas Day - Capacity		Application Window / Date Auction(s) Held
		From	To	
2012/13	Enduring Annual NTS Exit (Flat) Capacity	1 Oct 2012	30 Sep 2013	Capacity booked in Summer 2009 Application Window
	Annual NTS Exit (Flat) Capacity	1 Oct 2012	30 Sep 2013	Capacity booked in Summer 2012 Application Window
	Daily Firm NTS Exit (Flat) Capacity (Day Ahead)	1 Oct 2012	30 Sep 2013	30 Sep 2012 to 29 Sep 2013
	Daily Firm NTS Exit (Flat) Capacity (Within Day)	1 Oct 2012	30 Sep 2013	1 Oct 2012 to 30 Sep 2013
	Off-Peak Daily NTS Exit (Flat) Capacity	1 Oct 2012	30 Sep 2013	30 Sep 2012 to 29 Sep 2013
2013/14	Annual NTS Exit (Flat) Capacity	1 Oct 2013	30 Sep 2014	Summer 2012 Application Window
2014/15	Annual NTS Exit (Flat) Capacity	1 Oct 2014	30 Sep 2015	Summer 2012 Application Window
2015/16	INDICATIVE Enduring Annual NTS Exit (Flat) Capacity	1 Oct 2015	-	Summer 2012 Application Window
		1 Oct 2016	-	
		1 Oct 2017	-	