

DISCUSSION DOCUMENT

Modification Proposals to the Gas Transmission Transportation Charging Methodology

NTS GCD 04:

Revisions to NTS Entry Capacity Reserve Price Discounts

11 May 2007

Table of Contents

| | |
|---|-----------|
| EXECUTIVE SUMMARY | 1 |
| 1 INTRODUCTION..... | 2 |
| 2 BACKGROUND..... | 2 |
| Entry Capacity Baselines and Reserve Prices | 2 |
| Under-recovery of Entry Capacity Auction Revenue - TO Commodity Charges | 3 |
| Over-recovery of Entry Auction Revenue..... | 4 |
| Entry Capacity Neutrality Arrangements | 4 |
| Entry Capacity Surrender | 4 |
| Licence and UNC Frameworks | 4 |
| 3 OBSERVATIONS FROM HISTORY OF AUCTION OUTCOMES..... | 5 |
| 4 NEW AND PROSPECTIVE INFLUENCES | 6 |
| 5 DISCUSSION OF AUCTION OUTCOMES | 7 |
| 6 OPTIONS PROPOSED FOR CHARGING METHODOLOGY CHANGES | 8 |
| 7 DISCUSSION..... | 11 |
| Cost Reflectivity | 11 |
| Promoting Efficiency | 12 |
| Avoiding Undue Preference | 12 |
| 8 QUESTIONS FOR DISCUSSION | 13 |
| APPENDIX A: ENTRY CAPACITY AUCTION ANALYSIS | 14 |
| APPENDIX B: LICENCE RELEVANT OBJECTIVES AND EU GAS REGULATIONS | 25 |

Executive Summary

This document sets out for discussion National Grid NTS's options for revising the Gas Transmission Transportation Charging Methodology (the "Charging Methodology") in respect of the setting of Firm and Interruptible NTS Entry Capacity discounts.

National Grid NTS currently sets Obligated NTS Entry Capacity reserve prices for all long, medium and short term Entry Capacity auctions on the same basis but applies discounts for Day-ahead and within-Day auctions. Revenue collected from all auctions held ahead of the Day is treated as TO entry revenue and any shortfall of allowed TO entry revenue is recovered through a uniform TO Entry Commodity Charge applied to flows at non-storage Entry Points. Net revenues and costs for within-Day capacity are shared between Users and National Grid NTS SO via the capacity neutrality process, with Users receiving or paying prorated to their firm capacity holdings.

Zero reserve prices were introduced for within-Day firm capacity auctions in 2003 and at the time it was considered that there may be sufficient competition at the majority of large beach terminals to guard against revenue under-recovery. There was also an expectation that the majority of shippers' entry capacity requirements would be procured well in advance of the gas day. It was also considered that non-zero reserve prices might inhibit price discovery. The bulk of within-Day capacity sold has been close to the reserve price, thus there is little evidence of true price discovery. This may also be a factor that inhibits shipper to shipper capacity trading at ASEPs. As a consequence Entry revenue under-recovery has increased year on year to the extent that the TO Entry Commodity Charge now exceeds reserve prices at most terminals.

National Grid NTS is concerned that the prevailing use of discounted reserve prices in short term auctions has generated effects that might be considered undesirable.

- There may be a disincentive to book capacity in the longer term, undermining locational signals for Entry Capacity in all auctions and undermining long-term signals for incremental capacity.
- Zero/discounted reserve prices may have led indirectly to the high and unpredictable short term capacity prices experienced when capacity becomes scarce.
- New entry points may be at a disadvantage in that no short term discounted capacity is available.
- Prices paid for interruptible capacity do not reflect the likelihood of interruption and therefore such Users receive a benefit from other Users paying for firm capacity.
- Discounted reserve prices for all short term auctions may have led to higher TO Entry Commodity Charges arising from under-recovery of allowed revenue.

This Paper seeks views on the principles involved and on the following options:

- Day-ahead NTS firm entry capacity auctions – should the 33% discount on Obligated NTS Entry Capacity Reserve Prices be retained, removed or applied conditionally at each NTS Entry Point?
- Within-Day NTS firm entry capacity auctions – should the 100% discount on Obligated NTS Entry Capacity Reserve Prices be retained, removed or applied conditionally at each NTS entry point?
- Interruptible NTS Entry Capacity auctions – should the 100% discount on NTS Entry Capacity Reserve Prices be retained, or applied conditionally at each NTS entry point?

1 Introduction

- 1.1 National Grid NTS has, in accordance with its licence obligation, kept its Gas Transmission Transportation Charging Methodology under review, and this discussion paper focuses on NTS Entry Capacity Reserve Price Discounts.
- 1.2 Since October 2003 a discount to reserve prices for within-Day entry capacity auctions has been set at 100%, i.e. zero floor price. This applies to both Firm and Interruptible Capacity. Day-ahead capacity has been offered at 33% of the NTS Entry Capacity reserve prices.
- 1.3 The rationale for these discounts has been examined in relation to the experience of operation of entry capacity auctions over the intervening years.
- 1.4 This paper also refers to other developments that may have a bearing on long and short term entry capacity auctions. The introduction of a Transportation Charging model¹ and elements of Ofgem's Proposals for National Grid's 2007-2012 Price Control² and NTS SO Baseline Entry Capacity changes.

2 Background

Entry Capacity Baselines and Reserve Prices

- 2.1 National Grid NTS offers NTS Entry Capacity for sale in a series of long, medium and short term auctions. It was envisaged that entry capacity auctions would provide reliable and robust investment signals and avoid undue preference in the provision of entry capacity. Currently, National Grid NTS has a Licence obligation to make available capacity up to the defined Obligated NTS Entry Capacity level at each ASEP in a clearing allocation by the end of the Gas Day.
- 2.2 For the avoidance of doubt, the obligated entry capacity level incorporates:
 - Initial NTS SO Baseline Entry Capacity as defined by the Licence
 - Incremental obligated capacity that has previously been released
 - Entry capacity that has been substituted to or from the ASEP as a result of National Grid's Entry Capacity Substitution Methodology
- 2.3 A proportion of NTS SO Baseline Entry Capacity (20%, reducing to 10% for the 2007-2012 Price Control Period) is held back from earlier auctions for full release in monthly and shorter term auctions. In the case of new entry points the initial NTS SO Baseline Entry Capacity is zero and therefore there are no medium or short term auctions.

¹National Grid Conclusions Report to the Authority NTS GCM 01: Alternative Methodologies for Determination of NTS Entry and Exit Capacity Prices and NTS GCM 06 consultation

²Ofgem Transmission Price Control Final Proposals dated 4 December 2006

- 2.4 A clearing allocation was defined in the National Grid NTS Licence³ as:
- “in respect of a terminal and period an allocation of entry capacity which either:
- results in all the capacity offered for sale being sold; or
 - has a reserve price of zero;”
- This however should not “contravene the provisions of..” Charging Licence obligations. The latter includes the requirements to ensure that reserve prices are set in a way that promotes competition, promotes efficient use of the system and avoids undue preference in the provision of transportation services.
- 2.5 National Grid NTS currently sets Obligated NTS Entry Capacity reserve prices for all long, medium and short term Entry Capacity auctions on the same basis but applies a discount for Users that purchase capacity in the short term auctions – 33.3 % for Day-ahead, and 100% for within-Day firm and interruptible capacity.
- 2.6 Ofgem’s 2007-2012 Price Control included a reduction in some NTS SO Baseline Entry Capacity levels and Proposals for introduction of an obligation on National Grid NTS to provide mechanism(s) to if necessary move Obligated NTS Entry capacity between ASEPs (as outlined in more detail in section 3).
- 2.7 In 2003, when zero reserve prices were introduced⁴ for within-Day firm capacity auctions, it was considered that there may be sufficient competition at the majority of large beach terminals to guard against revenue under-recovery. There was also an expectation that the majority of shippers’ entry capacity requirements would be procured well in advance of the gas day. Additionally it was considered that non-zero reserve prices might inhibit the release of NTS Entry Capacity and inhibit price discovery.
- 2.8 The 100% discount for interruptible prices (i.e. a zero price) increases the likelihood of additional capacity being released, where available, in the short term, and recognises the right of the system operator to curtail interruptible Entry Capacity on the Gas Day. It should be noted that NTS Interruptible Entry Capacity is made available only where there is an expectation (as defined in the UNC⁵) that there may be unutilised firm NTS Entry Capacity on a gas day.

Under-recovery of Entry Capacity Auction Revenue - TO Commodity Charges

- 2.9 National Grid NTS currently levy a uniform TO Entry Commodity charge at Entry Terminals to correct for under-recovery of allowed income from entry capacity auctions. The target revenue for entry is 50% of the allowable TO revenue remaining after revenue recovered from the DN Pensions charge has been netted off; the remaining 50% is targeted at exit Users.
- 2.10 TO Entry Commodity Charges have increased year on year due to growing under-recovery of Entry Capacity Revenue. The sensitivity of TO Commodity charge to under-recovery is illustrated in Appendix A Table A1.

³ NTS Gas Transporter Licence Special Conditions C8A and C8B, April 2007

⁴ Transco Pricing Consultation 76 and Transco Modification Proposal 0630

⁵ Uniform Network Code v2.33 Transportation Principal Document B2.5.10/11

Over-recovery of Entry Auction Revenue

- 2.11 The current mechanism that applies for the situation where auction revenues (ahead of the gas day) exceed 50% of allowed TO revenue was implemented in PC65.
- 2.12 In brief, this apportions the over-recovery to offset the entry capacity buyback neutrality costs, assuming that the total buyback costs are greater than the over-recovery.
- 2.13 There has not been over-recovery of Entry Auction Revenue since early experience at the introduction of the Entry Capacity Auction regime.

Entry Capacity Neutrality Arrangements

- 2.14 Currently, revenues from the sale of entry capacity, which are obtained through auctions held on the Gas Day, are streamed into the SO Control. The revenues are used to offset Entry Capacity Buyback costs, through the neutrality mechanism.
- 2.15 These arrangements were put in place to provide linkage between entry capacity sold within-Day and potential buyback costs arising from the sale of that entry capacity.
- 2.16 Net costs or revenues are shared for each gas day between National Grid NTS SO and Users, the latter prorated to their Entry Capacity holdings.

Entry Capacity Surrender

- 2.17 Users may offer to surrender firm entry capacity and there has been a working practice for National Grid to take zero priced offers.

Licence and UNC Frameworks

- 2.18 Any proposed change to reserve price discounts may need to be reflected in National Grid's Gas Transporter Licence in respect of the NTS and may need to be reflected in the Uniform Network Code (UNC). Such changes would need to be progressed under separate governance processes to any charging methodology proposals.
- 2.19 The following aspects would need to be considered;-
- NTS Licence and the UNC⁶ references to applying a zero price in an entry auction and any associated conditions for such application
 - NTS Licence and UNC arrangements relating to streaming of revenues from within-Day entry capacity sales.

⁶ Uniform Network Code Transportation Principal Document Section B2.4.13 (f)

3 Observations from History of Auction Outcomes

- 3.1 An analysis of Entry Capacity auction outcomes for the period 2002 to February 2007 at the six large beach terminals of the NTS was undertaken to explore market behaviour with zero reserve prices for within-Day entry capacity auctions. Illustrative data is presented graphically in Appendix A, including reference to entry capacity Baselines that were effective until 1st April 2007.
- 3.2 Clearance of available entry capacity has occurred in winter 2006/7 at all six terminals and the pattern of occurrence varies between terminals, as illustrated in Figures A1 to A12.
- 3.3 At St Fergus a high proportion of Entry Capacity was sold in long term (Quarterly and Monthly) auctions and all available Entry Capacity generally cleared in Daily auctions.
- 3.4 Sales from long term auctions at the other five terminals have generally been less than 50% of the available Obligated NTS Entry Capacity levels except in winter 2006/07 where higher proportions of Obligated NTS Entry Capacity were sold at Bacton and Easington. Baseline at Easington sold out in the Rolling Monthly auctions for February and March 2007.
- 3.5 In winter 2006/7 sales from daily auctions have regularly sold out for all the main terminals. In previous winters this situation either did not arise or was less pronounced (except St Fergus, as mentioned above, and for winter 2005/6, Teesside).
- 3.6 Interruptible capacity sales have been substantial when there is firm capacity available. Scaling back of interruptible capacity has occurred, but has been quite rare.
- 3.7 Whilst Obligated NTS Entry capacity sold out in winter 2006/7 through daily auctions, end of Day energy flows, (plotted in Figures A13 to A18) and Ten Year Statement peak supply forecasts⁷ were generally substantially below this, Easington being a notable exception. Thus the demand for capacity, including that available at zero price, has provided poor indication of the capacity actually used or needed.
- 3.8 In aggregate for 2006/7, allocation at each terminal of Daily capacity was in the range 10 to 70%, whereas revenue from Daily capacity auctions was in the range 0.2 to 8% as shown in Figures A19 and A20. These also show the history of allocation and revenue from Daily entry capacity auctions.
- 3.9 Within-Day auctions have frequently cleared at zero or close to zero price and thus provided little if any signal of the value of short term capacity to Users and typically raised little revenue.
- 3.10 There has been little User to User trading of capacity at ASEPs, presumably due to buyers' acquisition at zero or low price from National Grid NTS.

⁷ <http://www.nationalgrid.com/uk/Gas/TYS/current/tys2006.htm>, Table A2.3A

- 3.11 TO revenue under-recovery has increased year on year, to the extent that the TO Entry Commodity Charge now exceeds reserve prices at most terminals, as shown in Table 3.1.

Table 3.1: History of TO Entry Commodity Charge

| Year | Period of charge | Price (pkWh) | % of allowed TO Entry revenue |
|--------|------------------|--------------|-------------------------------|
| 2004/5 | Oct-Mar | 0.0071 | 17.5 |
| 2005/6 | Oct-Mar | 0.0079 | 17.8 |
| 2006/7 | Oct-Mar | 0.0164 | 36.0 |
| 2007/8 | Oct-Sept | 0.0120* | 42.3 |

* Note that for the first time this charge is applied to the full 12 month period.

4 New and Prospective Influences

- 4.1 Revised NTS SO Entry Capacity Baselines effective from 1st April 2007 are proposed to be implemented by Ofgem⁸, resulting in a ~50% reduction at Barrow and Teesside, and ~30% reduction at Theddlethorpe. There has been little change at the other main beach terminals. In aggregate there is now ~23% less entry capacity Baseline capacity at these six terminals. Thus Obligated NTS entry capacity has become scarcer at three large beach terminals. This may influence Users' strategies for acquisition of entry capacity in long term auctions.
- 4.2 The introduction of a Transportation Model approach to NTS capacity charging through Gas Charging Methodology proposal (NTS GCM01) excludes spare peak capacity. Implementation would lead to Obligated NTS Entry Capacity reserve prices for long term auctions being more reflective of costs incurred in making capacity available and would be higher compared to the prevailing UCA based prices. Thus if the quantity of capacity allocated in long term auctions remained unaltered there would be higher recovery of allowed TO revenue. The higher reserve prices may influence Users' strategies for acquisition of entry capacity in long term auctions. Subsequently Gas Charging Methodology consultation NTS GCM06 consultation has been launched that could lead to a further change however entry prices would nevertheless be expected to be higher than prevailing UCA based prices.
- 4.3 In Ofgem's Final Proposals for National Grid NTS's Price Control for the period 2007-2012² it is proposed to place an obligation on National Grid NTS to provide transfer mechanisms for Obligated NTS Entry capacity. The concept could result in increase in Obligated NTS Entry capacity at some terminals and reduction at others. Thus there would be increased uncertainty in the availability of Obligated NTS Entry capacity in daily auctions. Once again this may influence Users' strategies for acquisition of entry capacity in long term auctions.

⁸ Gas Act Section 23 Notice from Ofgem dated 30 March 2007.

² Ofgem Transmission Price Control Final Proposals dated 4 December 2006

5 Discussion of Auction Outcomes

- 5.1 National Grid NTS is concerned that the continued use of discounted reserve prices in short term auctions may continue to generate effects that might be considered undesirable.
- 5.2 Users may hold back from bidding for capacity in the longer term auctions, thus undermining locational signals for Entry Capacity in all auctions and undermining long-term signals for incremental capacity.
- 5.3 Discounted or zero short term reserve prices may seem attractive when capacity is perceived to be in plentiful supply, but can lead to high and unpredictable capacity prices when that same capacity becomes scarce. Discussions with the industry via the Gas Transmission Charging Methodology Forum⁹ have indicated that stable, or at least predictable, prices were preferable.
- 5.4 New entry points may be at a disadvantage in that no short term discounted capacity is available. Effectively new participants that who are not be able to benefit from the entry discounts may, through the TO Entry Commodity Charge, be cross-subsidising existing participants.
- 5.5 Reserve price discounts may be a factor that inhibits entry capacity trade at ASEPs with unsold Obligated NTS Entry capacity where some Users may have surplus capacity holdings and others are seeking short term rights.
- 5.6 Applying a discounted reserve price policy unconditionally for firm capacity short term auctions has also contributed towards higher commodity charges arising from under-recovery in the long term Entry Capacity auctions. The TO Entry Commodity Charge was designed as a correction mechanism for under-recovery of allowed revenue from auctions. Using this charge to collect a large amount of under-recovered income from entry capacity auctions may result in a redistribution of charges from Users acquiring Entry Capacity at a discounted rate to those Users that have previously paid a “full” rate for capacity.

⁹ <http://www.nationalgrid.com/uk/Gas/Charges/TCMF/>

6 Options Proposed for Charging Methodology Changes

This section sets out three options for each of the three daily auction types which might address the issues associated with NTS Entry Capacity Baseline Reserve Price discounts. The aim should be to better meet charging obligations in the licence and EU Regulations, such as minimising cross-subsidies, facilitating effective competition and generating investment signals, and should be taken in the context of all other changes such as those outlined in section 4 (Baseline changes, introduction of a Transportation Model, and proposed obligations to introduce transfers and trades).

Table 6.1 provides a summary of options for discounts that are then defined at a high level and discussed. Options for each auction type can be considered in any combination from the matrix below e.g. Option 1 for Day-ahead, Option 2 for within-Day and Option 3 for interruptible, or Option 2 for all three auction types, etc. QSEC, AMSEC and RMSEC do not have discounts and no changes are proposed.

Table 6-1:

Options for Discount Factors for Entry Capacity Baseline Reserve Prices

| Daily Auction Type | Option 1 (Remove) | Option 2 (Conditional) | Option 3 (Retain) |
|------------------------|----------------------|---------------------------|----------------------|
| DSEC Day-ahead (Firm) | 0% | 33.3% Conditional* | 33.3% |
| DSEC Within-Day (Firm) | 0% | 100% Conditional* | 100% |
| DISEC (Interruptible) | N/A | 100% Conditional* | 100% |

* see Option 2 description.

Option 1 Removal of discounts for Obligated NTS Entry Capacity reserve prices for firm NTS Entry Capacity

This option proposes that:

- 6.1 Discounts are removed for Obligated NTS Entry Capacity reserve prices for firm NTS Entry Capacity unconditionally.
- 6.2 For the avoidance of doubt, this proposed option would not change the discount applied to Daily Interruptible NTS Entry Capacity

Option 2 Conditional application of discounts for Obligated NTS Entry Capacity reserve prices for NTS Entry Capacity

This option proposes that for each ASEP:

- 6.3 Current discounts for entry capacity are only applied if all or a significant proportion [90%] of the capacity available in Quarterly and Monthly auctions is sold.
- 6.4 Current interruptible discounts are only applied if all or a significant proportion [90%] of the firm capacity available is sold.

Option 3 Retain all discounts for reserve prices for NTS Entry Capacity

This option proposes that:

- 6.5 There is no change to the discounts for reserve prices for NTS Entry Capacity.

Discussion of option 1 – removal of discounted reserve prices for firm NTS Entry Capacity

- 6.6 This may encourage more bidding in longer term auctions and help Users justify such decisions since the “wait and see” possibility of zero priced firm capacity would no longer be available. Greater participation would thus provide stronger long-term investment signals for incremental capacity and stronger signals as to which locations are required.
- 6.7 Discount removal may help stabilise short term capacity prices if previous auction rounds provide timely signals for efficient NTS investment such that the demand and need for prompt capacity can be satisfied.
- 6.8 New entry points would not be competing with existing entry points that may benefit from firm NTS Entry capacity being available at discounted reserve prices in short term auctions.
- 6.9 Users with surplus long term capacity holdings at ASEPs with unsold capacity should have more opportunity of trading to others seeking short term rights.
- 6.10 Discount removal would be expected to put downward pressure on TO Commodity charges since any reliance on “free” or discounted Daily firm capacity would be removed and greater revenues would be expected from greater capacity sales ahead of the Day at non-discounted prices.
- 6.11 Clearance allocation and price discovery of daily capacity might be inhibited if the associated uncertainty meant that Obligated NTS Entry Capacity reserve prices were higher than the value to Users. The short term market value is difficult to predict in advance, as it will be dependent on many factors, including:
- Levels of Obligated NTS Entry capacity and remaining unsold Obligated NTS Entry capacity
 - Levels of competition at an entry point
 - Perceptions of scarcity of capacity, due to constraints on the system
 - Historical buy-backs seen at the entry point
 - Contractual obligations
 - User portfolios
 - Daily Balancing requirements
 - Other markets
 - Seasonal effects
 - Effects of reduced Obligated NTS Entry Capacity levels, a Transportation Model, and potentially Transfers and Trades

If capacity is expected to be scarce at an entry point, whether by virtue of an Obligated NTS Entry capacity level that reflects the physical flows through the entry point, competition at the entry point or (anticipated) system constraints, it is likely that there will be an incentive to pay a price higher than zero for capacity. If a User has a requirement to flow gas at a specific entry point, but does not hold capacity for the flow desired, it is also possible that they are prepared to pay a price for that capacity. Thus it is possible that the use of a zero reserve price for daily auctions is correct in these circumstances, as it will not prevent the market value of the capacity from being discovered. This option for firm capacity might however lead to greater demand for interruptible capacity and this is considered further in discussion of Option 2.

Discussion of option 2 – conditional removal of discounted reserve prices for NTS Entry Capacity

- 6.12 For firm capacity the condition needs to provide an indication that there might be sufficient competition at an entry point.
- 6.13 If the “competition for firm” condition is not satisfied then the same effects to those of option 1 would be expected since non-discounted reserve prices would apply.
- 6.14 Where the “competition for firm” condition is satisfied (i.e. there is indication of sufficient competition) then there would be opportunity for auctions to reveal the value of Daily capacity, whether it be above or below the reserve prices. This should address any concern about clearance allocation and price discovery as set out above in 6.11 for Option 1.
- 6.15 If firm entry capacity discounts were removed and discounts were unconditionally retained for interruptible capacity this might lead to “a flight from firm” and greater demand for interruptible entry capacity. While Users might demand interruptible capacity at an entry point if all firm capacity were not sold, then Users, by acquiring interruptible capacity, would actually be accessing firm capacity due to the minimal expectation of interruption (scale back). The zero reserve price for interruptible capacity resulting from a 100% discount might therefore only be appropriate if most of the firm capacity had already been sold at the ASEP. An alternate but equivalent approach might be to only release of interruptible capacity once most of the firm capacity had been released. This would require a UNC change.

Discussion of option 3 – Retain all discounts for reserve prices for NTS Entry Capacity

- 6.16 Changes such as Obligated NTS Entry Capacity level reduction, Transportation Model based capacity charges and entry capacity transfers and trades (see Section 4) may lead to a combination of more effective competition at some NTS entry points and minimised under-recovery of revenue in auctions and therefore reduction in the TO Entry Commodity Charge.
- 6.17 If some NTS entry points still had a lack of effective competition then the opportunity would remain to acquire Daily firm capacity at little or no cost and, it might be argued, thereby receive a cross-subsidy from other Users.
- 6.18 If some NTS entry points had a low likelihood of interruption but the opportunity remained to acquire interruptible capacity at little or no cost it might be argued there would be a cross-subsidy from other Users.

- 6.19 If at some NTS Entry points Users still did not procure their entry capacity requirements well in advance of the gas day then investment signals would be weak or absent at these points. While this might be appropriate if no incremental capacity were required, it could lead either to constraints or calls for investment with weak or absent User commitment.

7 Discussion

This section presents the views of National Grid NTS in respect of the extent to which the options set out under section 6 would achieve the relevant methodology objectives under National Grid NTS GT Licence and the EU Gas Regulations (as summarised under Appendix B).

National Grid NTS has a Licence obligation to use all reasonable endeavours to offer all obligated capacity in at least one clearing allocation unless this would contravene the relevant charging Licence conditions. The effective 100% discount for within-Day firm capacity was introduced to meet this Licence obligation, however National Grid NTS has reviewed the impact of this discount and believes unconditional application may no longer be consistent with its wider charging obligations. Analysis to support this view was presented at the Gas TCMF and is presented in the Appendix A.

Cost Reflectivity

- 7.1 The National Grid NTS Licence states that where transportation prices are not established through an auction, prices calculated in accordance with the methodology should reflect the costs incurred by the licensee in its transportation business. Where prices are established by means of auctions, either no reserve price is applied or reserve prices are calculated at a level that promotes efficiency, avoids undue preference in the supply of transportation services and promotes competition between gas shippers and between gas suppliers.
- 7.2 If NTS Entry Capacity auction reserve prices are not set on a cost reflective basis, through the unconditional application of discounts, the costs not collected through the auction process will be collected through TO Entry Commodity Charges. This raises the issue that if prices established through auctions are not cost reflective then TO Entry Commodity Charges may not be cost reflective.
- 7.3 Removal or conditional application of discounts, in combination with the introduction of a Gas Charging Transportation Model (as set out in NTS GCM 01 or potentially modified by NTS GCM 06), would mean that the costs incurred in making transportation capacity available at an ASEP would be recovered through Entry Capacity charges to capacity holders at the relevant ASEPs. TO Entry Commodity Charges could be minimised and hence charges overall would be more cost reflective.

Promoting Efficiency

Investment Signals

- 7.4 National Grid NTS believes that current discounts for short term NTS Entry Capacity at existing entry points disincentivises Users to participate in long term auctions and therefore makes it difficult for National Grid NTS to make efficient investment decisions to provide capacity. Consistent prices across all NTS Entry Capacity auctions reduce disincentives on Users to participate in long term auctions, but there may be a case for conditional short term discounts.

Stability

- 7.5 National Grid NTS is concerned that the industry desire for stable and predictable prices is not fulfilled by unconditionally discounting capacity prices in the short term. National Grid NTS believes that when capacity becomes constrained at an entry point, where previously there was a perception of surplus capacity, and where long-term signals for incremental capacity investment have not been received from QSEC auctions, high and volatile prices and more frequent scale back of interruptible will be observed until incremental capacity is signalled and provided.

Avoiding Undue Preference

- 7.6 Removal or conditional application of discounts might help to preserve locational signals in short term auctions and might prevent Users at non-competitive entry points from purchasing capacity cheaply, potentially passing on costs of providing capacity at these entry points to other system Users, through TO Entry Commodity Charges.
- 7.7 Users with surplus capacity holdings purchased in long term auctions will be inhibited from trading away their surplus if substantially discounted primary capacity was unconditionally available to other Users.
- 7.8 The use of LRMC based prices under GCM01 (or GCM 06) will ensure that, in the absence of effective competition at an entry point, locational prices avoid undue preference. Discounts that set a zero reserve price can destroy locational signals in short term auctions and allow Users at non-competitive entry points to purchase capacity cheaply, potentially passing on costs of providing capacity at these entry points to other system Users, through TO Entry Commodity Charges.

8 Questions for Discussion

This paper has discussed the issues relating to the setting of daily entry capacity auction reserve prices, specifically the removal (Option1), or the conditional application (Option 2) of discounts applied to Day-ahead, within-Day and interruptible entry capacity reserve prices. The paper has also considered retaining discounts (Option 3).

We would be pleased to receive views on the following:

1. **The principle that, in the absence of an indication of effective competition, NTS Entry capacity reserve prices should not be discounted for Daily auctions of firm capacity.**
2. **The principle that, in the absence of a material likelihood of interruption, NTS Entry interruptible capacity should not be auctioned with zero reserve price.**
3. **That secondary capacity trading of Users' surplus holdings at an NTS entry point is inhibited by the availability, at a substantial discount, of primary capacity at the same entry point.**
4. **Whether it is a practical necessity to always have auctions with zero reserve price in pursuit of price discovery and clearance of Obligated NTS Entry capacity.**
5. **Specifically for Day-ahead NTS firm entry capacity auctions – should the 33% discount on NTS Entry Capacity Baseline Reserve Prices be removed, applied conditionally at each NTS entry point (indication that there is sufficient competition in play such as 90% of the capacity available in Quarterly and Monthly auctions is sold.), or retained.?**
6. **Specifically for Within-Day NTS firm entry capacity auctions – should the 100% discount on NTS Entry Capacity Baseline Reserve Prices be removed, applied conditionally at each NTS entry point (indication that there is sufficient competition in play such as 90% of the capacity available in Quarterly and Monthly auctions is sold.), or retained.?**
7. **Specifically for Interruptible NTS entry capacity auctions – should the 100% discount on NTS Entry Capacity Baseline Reserve Prices be applied conditionally at each NTS entry point (i.e. only when there is a material probability of interruption such as when 90% of the firm capacity available is sold), or retained?**
8. **The effect of discounting on other charges (e.g. TO Entry Commodity Charges) that Users may pay.**
9. **When any proposed changes to discounts should be implemented or further considered?**

The closing date for submission of your responses is **Thursday 21 June 2007**. Your response should be e-mailed to box.transmissioncapacityandcharging@uk.ngrid.com or alternatively by post to Eddie Blackburn, Regulatory Frameworks, National Grid, National Grid House, Gallows Hill, Warwick, CV34 6DA. If you wish to discuss any matter relating to this Charging Methodology discussion paper then please call Eddie Blackburn on ☎ 01926 656022.

Responses to this discussion will be incorporated within a National Grid NTS discussion conclusion report. If you wish your response to be treated as confidential then please mark it clearly to that effect.

Appendix A: Entry Capacity Auction Analysis

This appendix presents the sensitivity of NTS TO Entry Commodity Charge to auction under-recovery of revenue, and data from Entry Capacity Auctions at the six main beach terminals and shows the entry capacity Baselines prior to changes effected on 1st April 2007. These ASEPs make up the vast majority of NTS Entry capacity bookings.

Figures A-1 to A-6 show capacity allocations for the period April 2002 to August 2006.

Figures A-7 to A-12 provides an update and shows winter 2006/7 in more detail.

Figures A-13 to A-18 show the aggregate end of Day energy.

Figure A-19 Firm Entry Capacity Energy Sold by Auction Type 2002/3 to 2006/7

Figure A-20 Firm Entry Capacity revenue by Auction Type 2002/3 to 2006/7

Table A1 Impact of under recovery of TO entry revenue from auctions on TO Entry Commodity Charge

| Under Recovery (£m) | TO Entry Commodity Charge (p/kWh) |
|---------------------|-----------------------------------|
| 1 | 0.0001 |
| 10 | 0.0009 |
| 50 | 0.0045 |
| 100 | 0.0091 |
| 150 | 0.0136 |

Figure A-1: Bacton Capacity Sales Apr 02-Aug 06

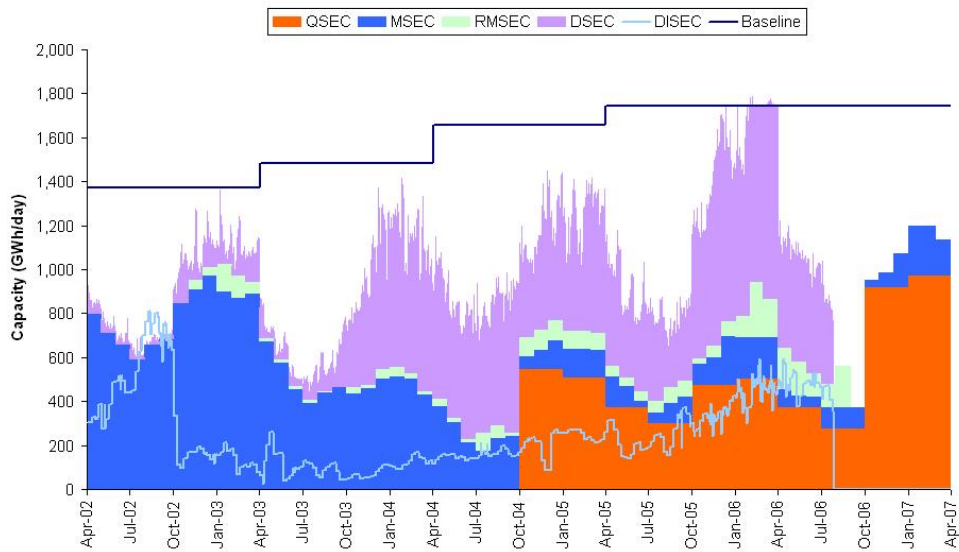


Figure A-2: Barrow Capacity Sales Apr 02-Aug 06

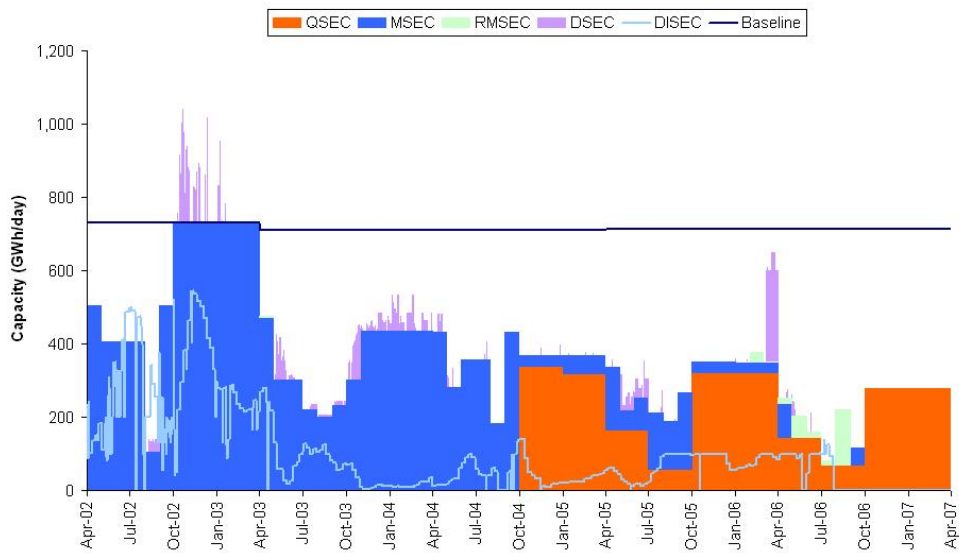


Figure A-3: Easington and Rough Capacity Sales Apr 02-Aug 06

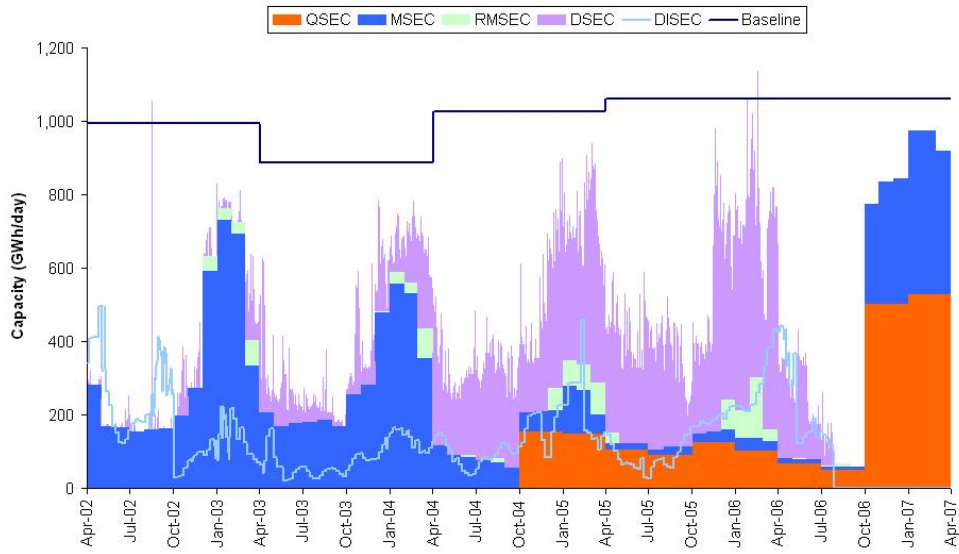


Figure A-4: St Fergus Capacity Sales Apr 02-Aug 06

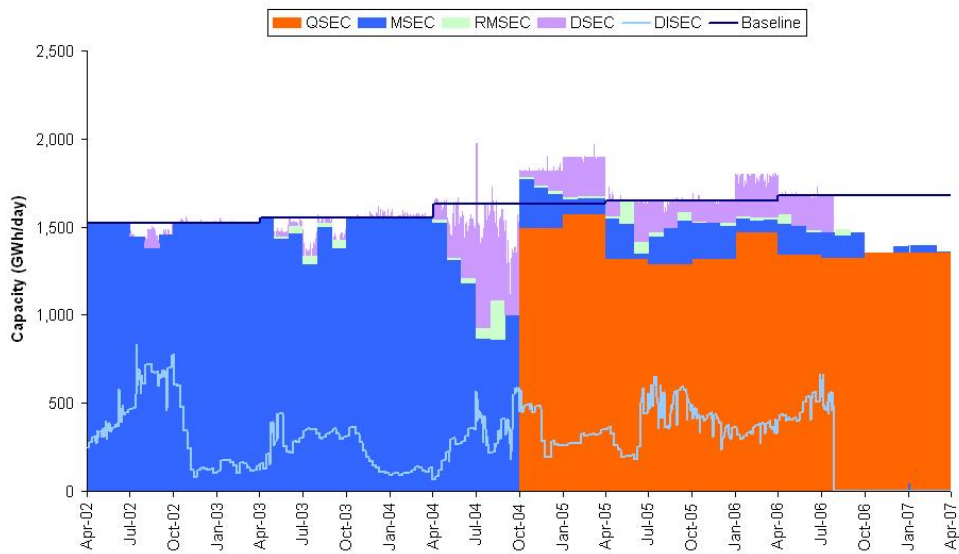


Figure A-5 : Teesside Capacity Sales Apr 02-Aug 06

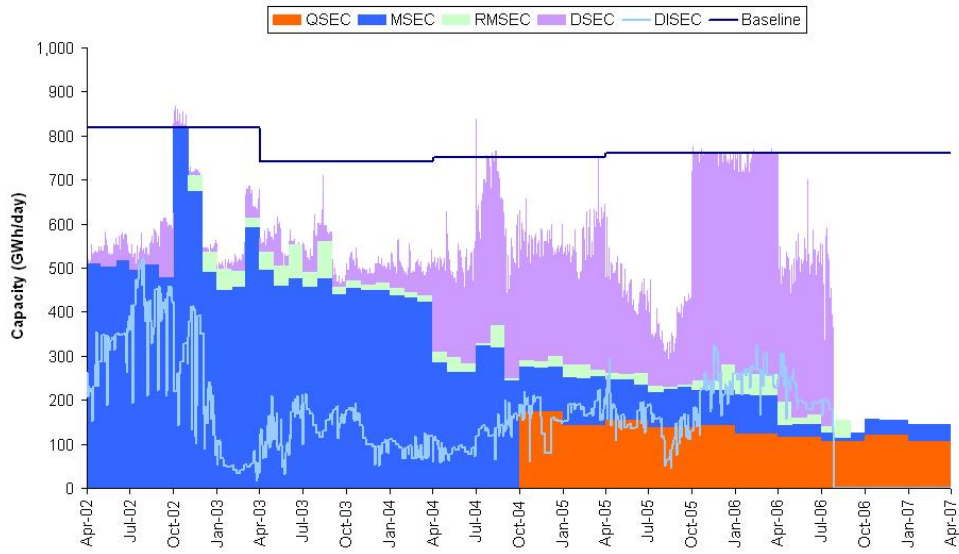


Figure A-6: Theddlethorpe Capacity Sales Apr 02-Aug 06

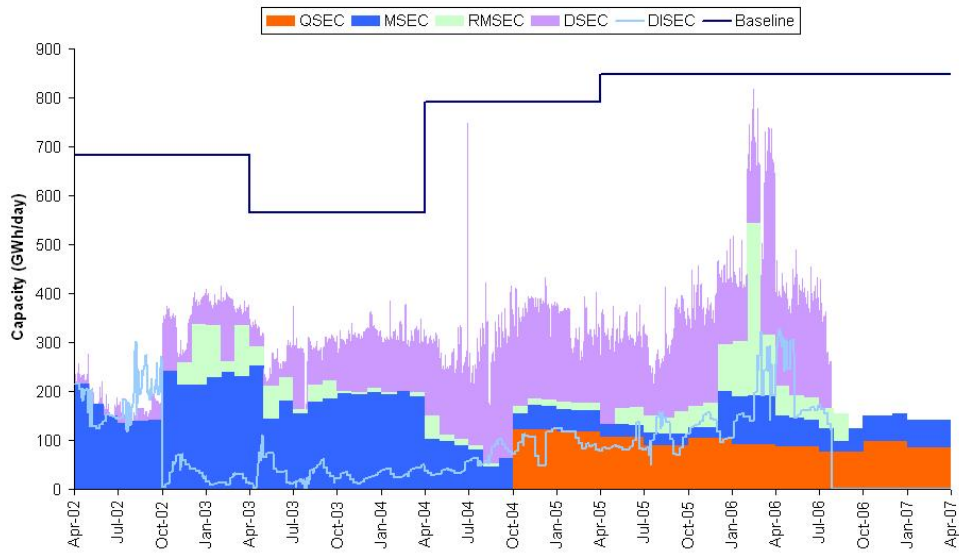


Figure A-7: Bacton Capacity Sales July 06 – Feb 07

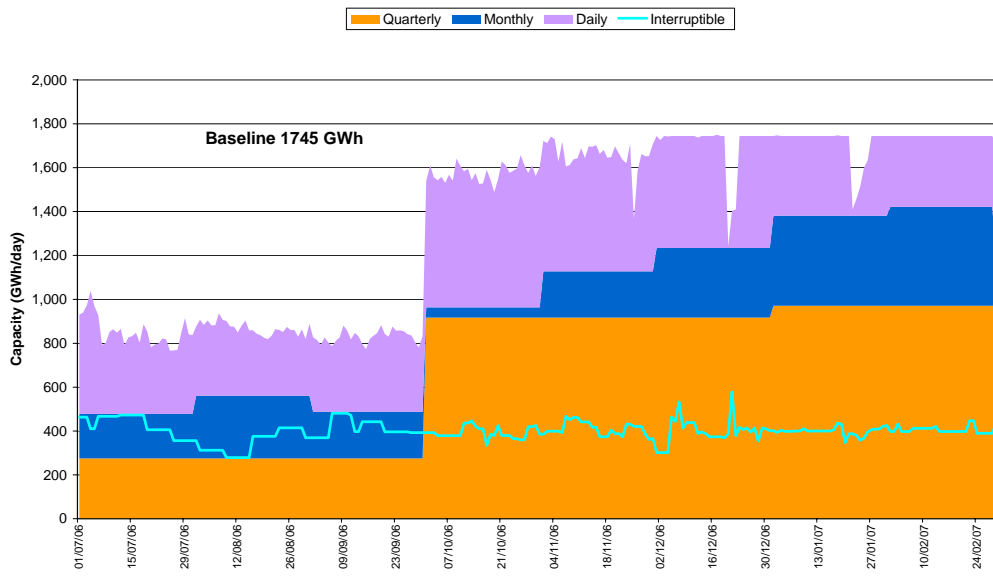


Figure A-8: Barrow Capacity Sales July 06 – Feb 07

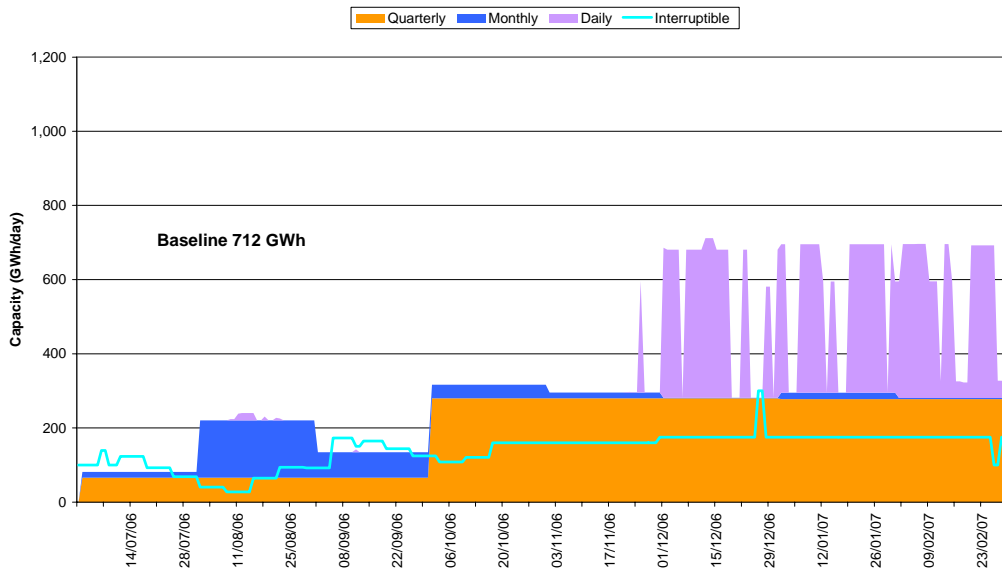


Figure A-9: Easington and Rough Capacity Sales July 06 – Feb 07

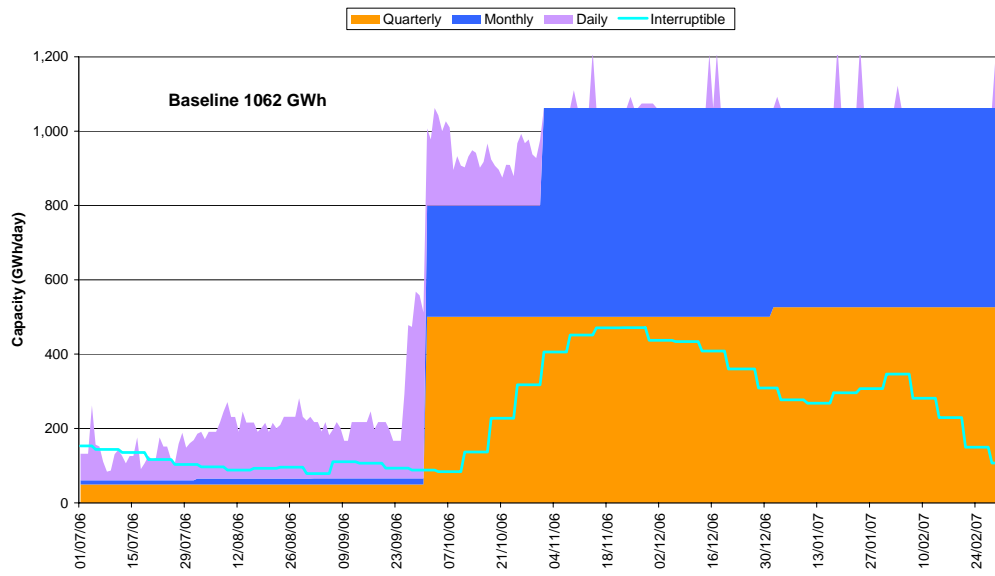


Figure A-10: St Fergus Capacity Sales July 06 – Feb 07

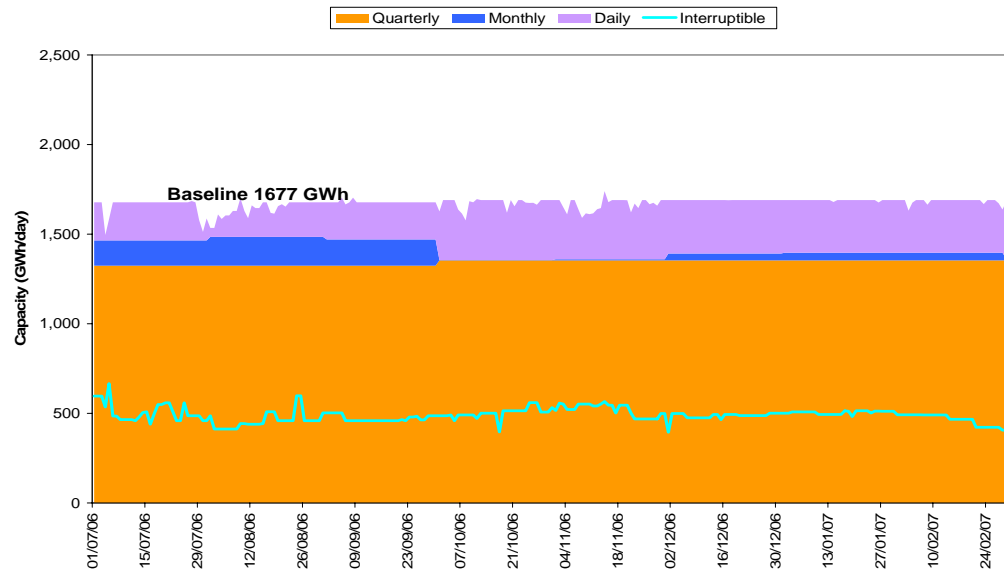


Figure A-11: Teesside Capacity Sales July 06 – Feb 07

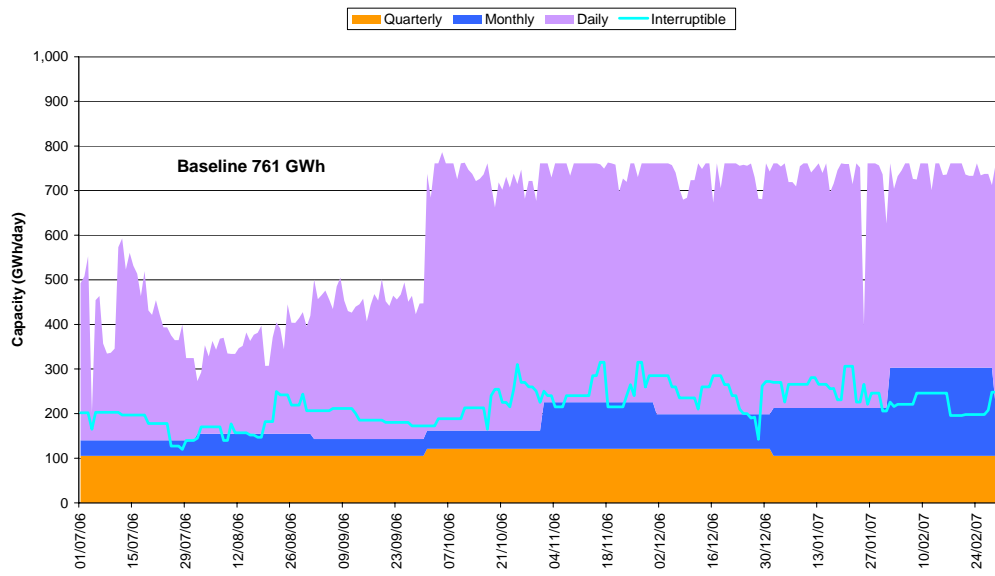


Figure A-12: Theddlethorpe Capacity Sales July 06 – Feb 07

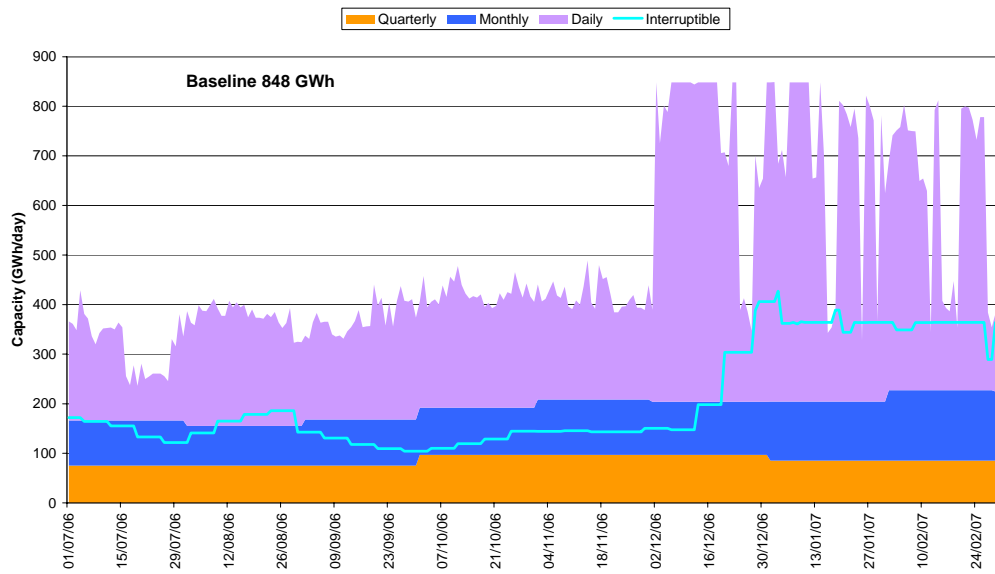


Figure A-13 Bacton End of Day Aggregate Energy Allocation July 06- Feb 07

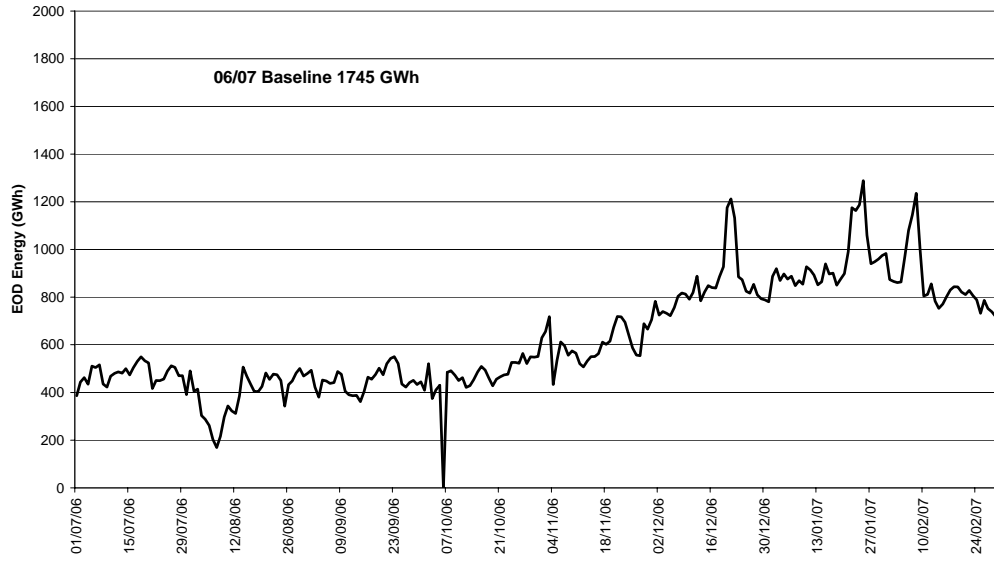


Figure A-14 Barrow End of Day Aggregate Energy Allocation July 06- Feb 07

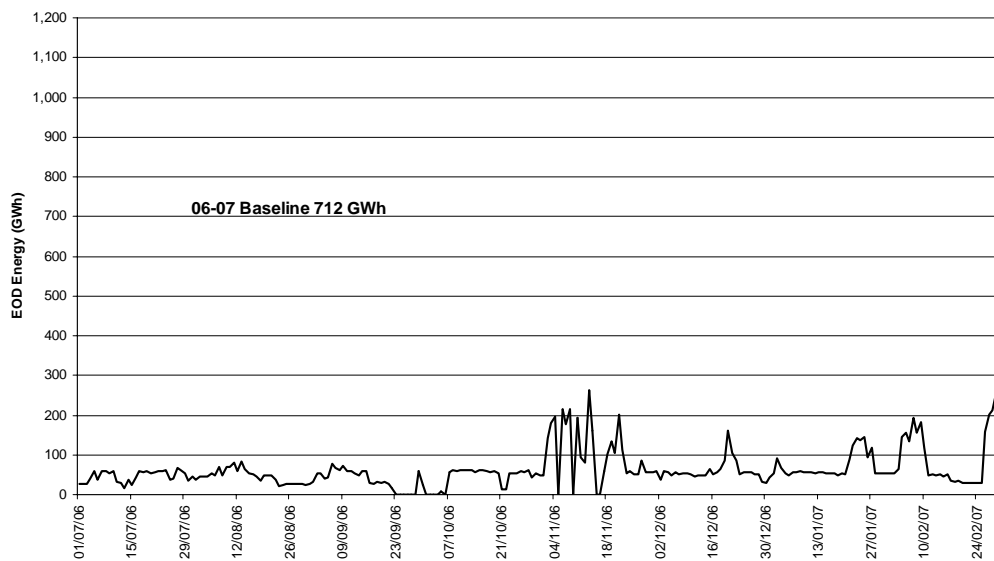


Figure A-15 Easington and Rough End of Day Aggregate Energy Allocation July 06- Feb 07

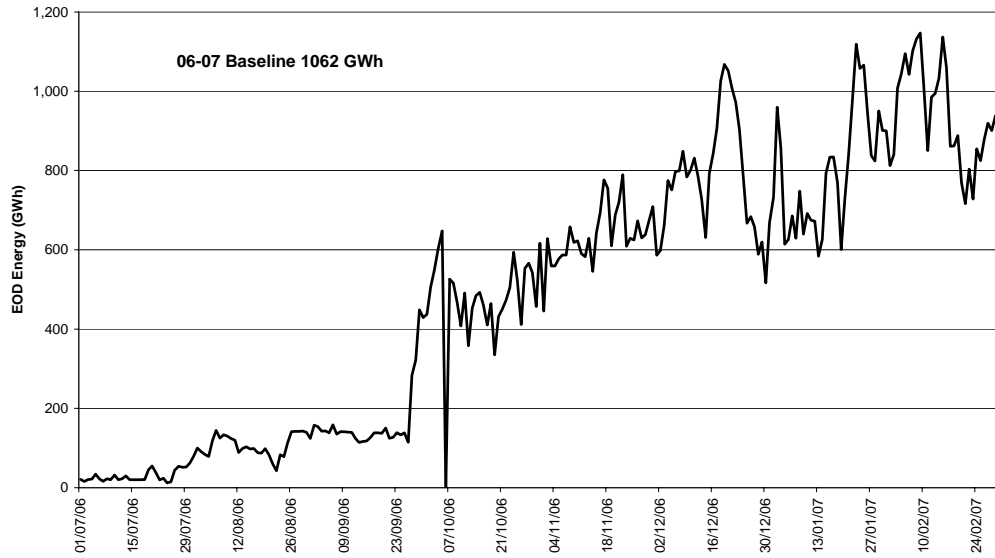


Figure A-16 St Fergus End of Day Aggregate Energy Allocation July 06- Feb 07

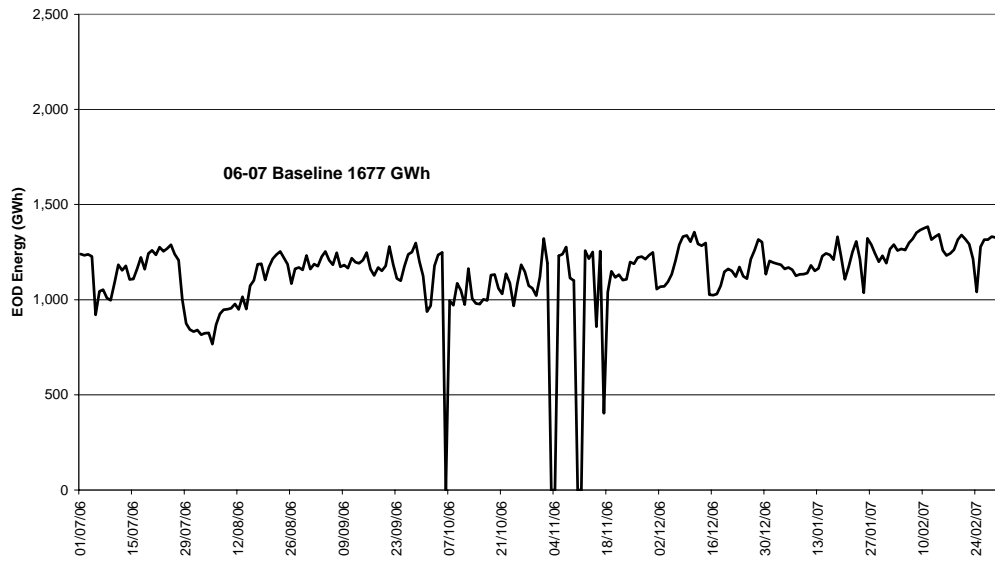


Figure A-17 Teesside End of Day Aggregate Energy Allocation July 06- Feb 07

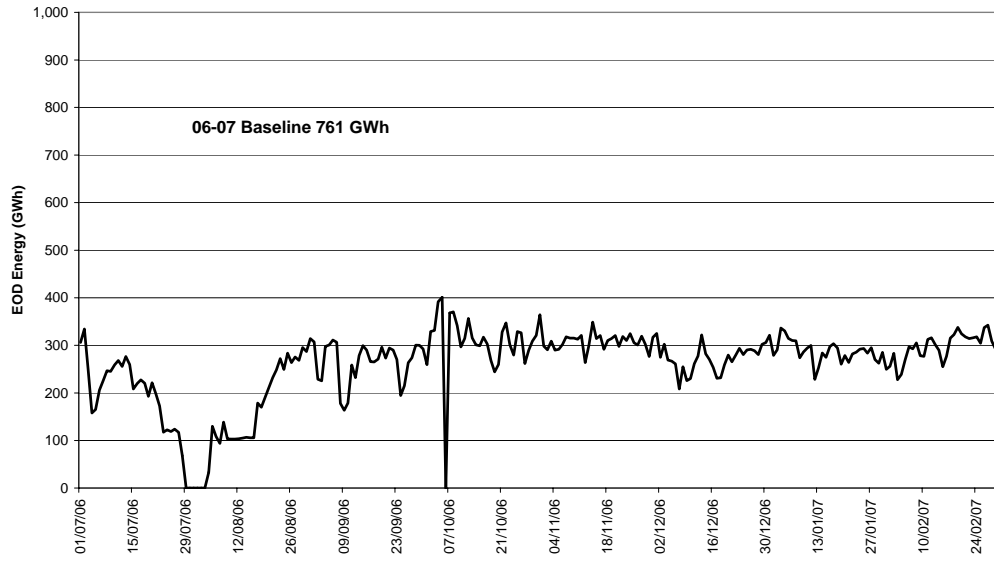


Figure A-18 Theddlethorpe End of Day Aggregate Energy Allocation July 06- Feb 07

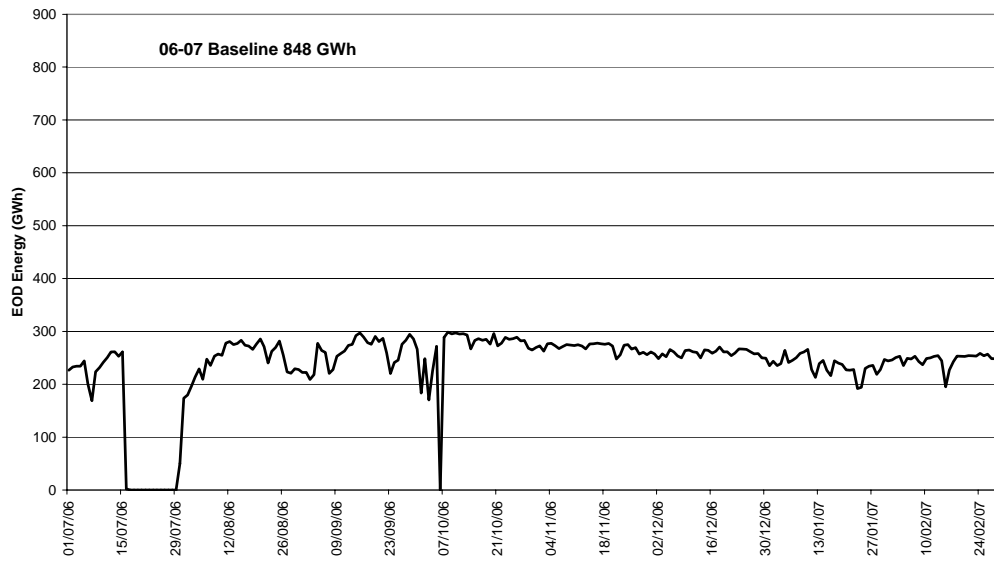


Figure A-19 Entry Capacity Energy Sold by Auction Type 2002/3 to 2006/7

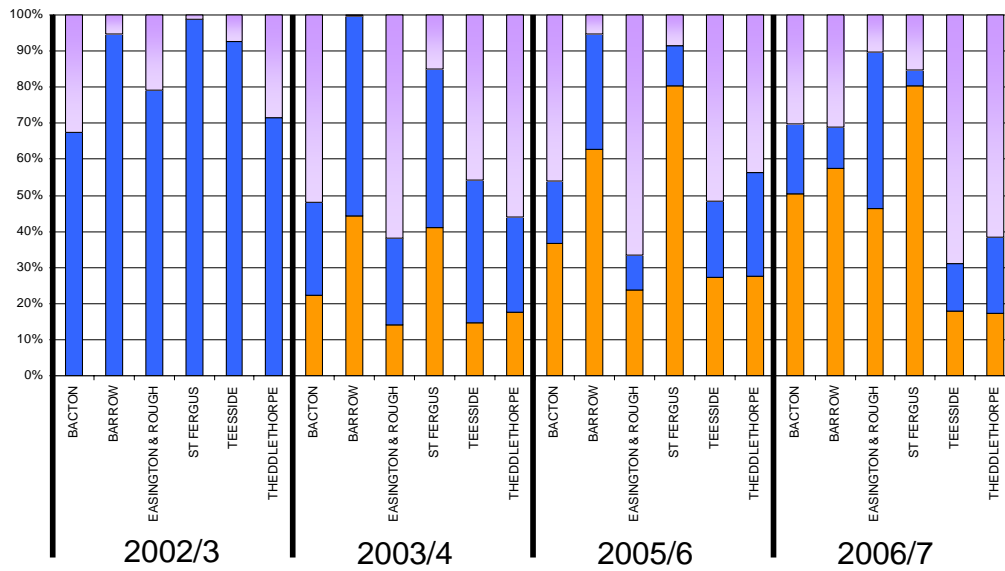
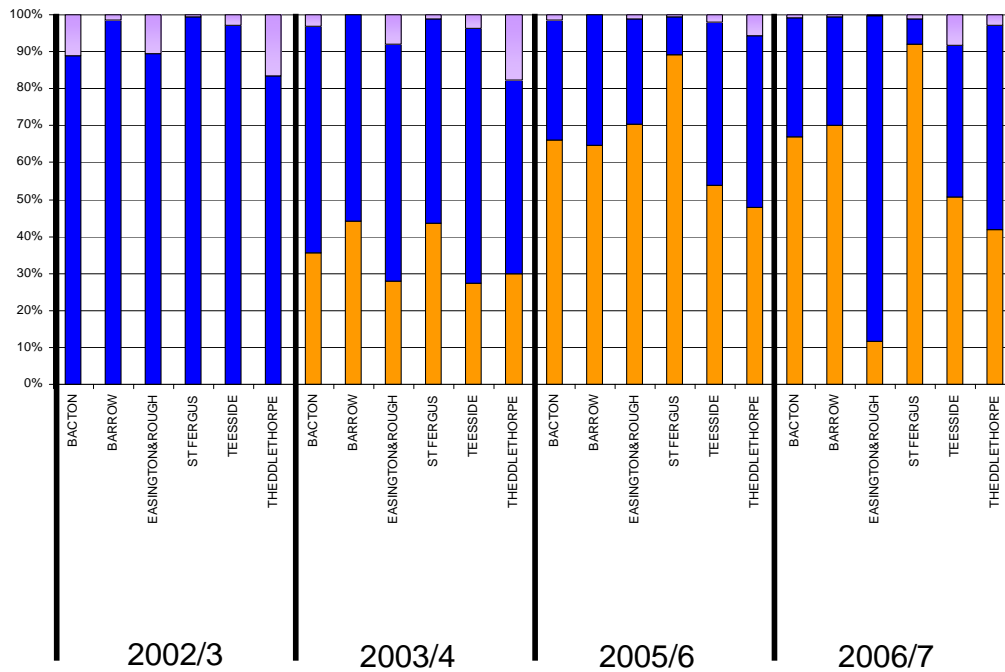


Figure A-20 Entry Capacity revenue by Auction Type 2002/3 to 2006/7



Appendix B: Licence Relevant Objectives and EU Gas Regulations

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

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.

Where prices are established by means of auctions, either

- 4) No reserve price is applied or
- 5) Reserve prices are calculated at a level that promotes efficiency, avoids undue preference in the supply of transportation services and promotes competition between gas shippers and between gas suppliers.

National Grid NTS is obliged to keep the NTS Charging Methodology under review at all times for the purposes of ensuring that it achieves the relevant objectives.

National Grid NTS also has an obligation to use all reasonable endeavours to ensure that obligated entry capacity is offered for sale in at least one clearing auction providing that this does not contravene wider Licence obligations including methodology objective (5) listed above.

EC Regulation 1775/2005 on conditions for access to the natural gas transmission networks (binding from 1 July 2006) states that 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.

All but the last of the principles listed above map onto the objectives for National Grid's Transmission Transportation Charging Methodology. In terms of cross border trade, the Regulation recognises that funding for network investment may require different tariffs across different transmission systems.