nationalgrid

CONCLUSIONS REPORT TO THE AUTHORITY

Modification Proposal to the Gas Transmission Transportation Charging Methodology

NTS GCM 19R:

Removal of NTS Daily Entry Capacity Reserve Price Discounts

30th April 2010

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Executive Summary

This document sets out final proposals for revising the Gas Transmission Transportation Charging Methodology (the "Charging Methodology") with regard to the setting of Daily NTS Entry Capacity reserve prices at NTS Entry Points. This document is issued by National Grid in its' role as Gas Transporter Licence holder in respect of the NTS ("National Grid").

In August 2009, National Grid launched a fundamental review of entry charging principles through the formation of the Entry Charging Review Group (ECRG). This was in response to growing industry concern about the increasing rate of the TO entry commodity charge. TO Entry Commodity Charges have increased, year-on-year, due to the increasing under-recovery from NTS Entry Capacity Revenue.

Through the ECRG, the discounts that apply to firm NTS daily entry capacity have been identified as a key contributing factor to the high level of the TO Entry Commodity Charge. It was requested by the ECRG that a discussion paper (NTS GCD 08) be raised to consult on the work carried out to date through the ECRG. In response to GCD08, the majority of respondents favoured the removal of the firm Daily NTS Entry Capacity reserve price discounts, as proposed in this document. A UNC proposal (UNC 0284) to remove the reference to the zero within-day reserve price has been sent for consultation to facilitate this charging proposal.

National Grid proposes that;

- The 33% NTS Entry Capacity Reserve price discount for day ahead daily entry capacity (DADSEC) is removed.
- The 100% NTS Entry Capacity Reserve price discount for within-day daily entry capacity (WDDSEC) is removed.
    - As a consequence of the removal of the discounts, day-ahead and within-day Daily NTS Entry Capacity reserve prices (p/kWh/day) would both be equal to the rolling monthly auction reserve prices

National Grid notes that;

- The revenue from the sale of within-day Obligated Daily NTS Entry Capacity (not redistributed via capacity neutrality) would be treated as TO revenue for charge setting purposes.
    - This would require a Licence change to facilitate the change in revenue treatment and
    - Currently all within day entry capacity revenue is SO revenue and is redistributed via capacity neutrality and therefore this would be subject to a UNC change to prevent revenue from the sale of within-day Obligated Daily NTS Entry Capacity being treated as SO and feeding capacity neutrality

<u>Implementation</u>

It is proposed that these revised reserve price arrangements are implemented in relation to capacity made available from 1st October 2010. A decision would be required at least two months prior to this date (31st July 2010) to allow for the code defined two month notice of charges.

This charging proposal, along with associated UNC Modification Proposal 0284, represents part of a phased approach seeking to reduce commoditization of entry capacity. These proposals are seeking to reduce the quantity of zero reserved priced capacity made available. A UNC Modification Proposal (UNC 0285) has also been raised to seek to reduce the quantity of Daily Interruptible NTS Entry Capacity made available as part of the first phase. It is anticipated that experience of the regime, post implementation, would inform the development of the next phase of proposals.

This report has been placed on National Grid's industry information website: http://www.nationalgrid.com/uk/Gas/Charges/

1. Introduction

Industry Concerns

1.1. In August 2009, National Grid launched a fundamental review of entry charging principles through the formation of the entry charging review group (ECRG). This was in response to growing industry concern about the increasing rate of the TO entry commodity charge.

1.2. TO Entry Commodity Charges have increased, year-on-year, due to growing under-recovery of Entry Capacity Revenue.

Review Objectives

1.3. The entry charging review has focussed on NTS entry revenue recovery from the available capacity products and the impact of the commodity charge on the distribution of costs on shippers at each aggregated NTS system entry point (ASEP).

1.4. The agreed objectives of the review are to identify any charging methodology and/or UNC modifications required to;

- Continue to recover allowed revenue while achieving the NTS Licence and EU relevant charging objectives.
- Maximise the proportion of NTS TO target entry revenue recovered through entry capacity charges.
- Appropriately incentivise long term booking of NTS Entry Capacity.
- Appropriately differentiate by price between the NTS Entry Capacity products made available.
- Incentivise Security of Supply.

2. Background

The TO Entry Commodity Charge

2.1. In accordance with the NTS charging methodology, National Grid recovers 50% of its TO allowed revenue (having first deducted metering and DN pensions related revenue) from entry charges with the remaining 50% recovered from exit charges.

2.2. NTS Entry capacity charges are not adjusted for allowed revenue, and any shortfall between target TO entry revenue and TO Entry capacity charges is recovered via the TO entry commodity charge, which is levied on all entry allocations other than storage and short-haul allocations.

2.3. One of the key factors, leading to entry capacity revenue under-recovery, is the discounting that applies to daily entry capacity reserve prices; a 33% discount applies to day-ahead auctions and a 100% discount applies to within-day entry auctions of firm capacity. Interruptible daily entry capacity is also auctioned with a zero reserve price.

Entry Capacity Auction Release Obligations & Reserve Pricing Setting

2.4. National Grid 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.

2.5. National Grid has a Licence obligation to make available capacity up to the defined obligated NTS Entry Capacity level at each ASEP in all auctions with incremental obligated capacity above this level being made available only in the long term QSEC auction.

2.6. 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

2.7. A proportion of NTS SO Baseline Entry Capacity (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 until obligated NTS Entry Capacity has been procured and released through a long-term QSEC auction.

2.8. Obligated NTS Entry Capacity is made available in quarterly blocks through the Long term QSEC auctions with a P0 reserve price. P0 prices are currently set using the Transportation Model with the relevant entry point at the obligated level.

2.9. Unsold Obligated NTS Entry Capacity from the QSEC auctions is made available in monthly blocks through the annual AMSEC auction and through the monthly RMSEC auctions. The reserve prices are currently set using the Transportation Model with the relevant entry point at the obligated level.

2.10. All NTS capacity products are priced on the same basis, under the prevailing Charging Methodology, with a days worth of capacity priced at 1/365th of the annuitised long run marginal cost (LRMC). Day ahead daily entry capacity prices are then discounted by 33% and on the day daily entry capacity prices are discounted by 100%. It should be noted that NTS exit prices are adjusted for allowed revenue by adding a uniform constant adjustment to all exit LRMCs.

2.11. National Grid 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 firm, and 100% for within-day firm and interruptible capacity.

2.12. The 33% discount for day-ahead capacity originates from the introduction of monthly capacity auctions. At this time, annual and monthly capacity products were auctioned with reserve prices equal to 75% and 50% of the administered entry capacity prices i.e. the price that would allow the collection of target revenue from forecast peak capacity requirements. The ratio of these prices was reflected with the 33% discount. Appendix C covers a brief history of the relevant charging methodology consultations and changes.

Over- recovery of Entry Auction Revenue

2.13. The current mechanisms that apply, where auction revenues (ahead of the gas day and excluding non obligated sales) exceed 50% of allowed TO revenue, are the buy-back offset mechanism and the TO Entry Commodity rebate mechanism.

2.14. The buy-back offset mechanism was implemented through PC65 and most recently revised through GCM09. This mechanism apportions the over-recovery to offset the entry capacity buyback costs which are met by shippers via the UNC defined capacity neutrality process. The level of over-recovery redistributed is capped at the level of the buy-back costs.

2.15. The TO Entry Commodity rebate mechanism was implemented through GCM10. This mechanism retrospectively rebates all or a proportion of TO Entry Commodity charges paid throughout the formula year. A further mechanism was introduced through GCM12 which allows a TO Entry Commodity credit which is an extension of GCM11 and effectively offsets the SO Entry Commodity charges.

Entry Capacity Incentive and Neutrality Arrangements

2.16. Currently, revenue from the sale of within-day firm entry capacity, any non-obligated entry capacity sold in any auction, and any Daily Interruptible Entry Capacity (DISEC) sold is defined as SO revenue in accordance with the NTS Licence. This revenue is redistributed through the UNC defined entry capacity neutrality mechanism.

2.17. These arrangements were put in place to provide a linkage between entry capacities sold within-day and potential buyback costs and any non obligated and potential buyback costs resulting from the sale of that entry capacity.

2.18. Net neutrality costs or revenues are shared for each gas day between Users, prorated to their Entry Capacity holdings.

2.19. There is an operational buy back incentive which includes the sale of within-day entry capacity (including non-obligated within-day or in any other auction) with a fifty percent sharing factor. The incentive results in additional SO allowed revenue, subject to a cap and collar, equal to fifty percent of the within-day entry capacity plus non-obligated entry capacity revenue, being recovered through the SO commodity charge which is levied on all entry and exit allocations other than storage and short-haul. It should be noted that the incentive also looks at capacity management costs but they are not relevant for this paper.

3. Discussion

Factors Contributing to the High TO Entry Commodity Charge Rate

3.1. Early experience of entry capacity auctions (1998 - 2002) was of bidding behaviour resulting in significant revenue over recovery. This may have been due to northern constraints and competition for St Fergus capacity, and limited experience of entry auctions. This behaviour resulted in charging methodology proposals that looked at resolving over recovery and reducing entry capacity floor/reserve prices.

3.2. Recent Experiences (2002 - Present) is of bidding behaviour resulting in under recovery, other than when a constraint became material in the Easington area. This may be due to a number of factors including; increased experience of auctions and lack of locational competition for capacity, increased certainty of capacity availability associated with baselines, profiling of capacity across the year, the clearing obligation and zero reserve prices. This behaviour has resulted in the introduction of the TO Commodity Charge and its increasing rate over the years.

3.3. Three key sources of entry capacity under recovery have been identified;

- The Price Paid
  - Prior to the 2007 QSEC auction, entry capacity reserve prices were set based on the UCA and were lower than prices set under the prevailing charging methodology. If capacity were procured, throughout the formula year, at the prevailing prices, and up to the forecast supply level identified as being required through the Transporting Britain's Energy (TBE) process (as published in the Ten Year Statement (TYS)) then National Grid could over recover.
  - Day ahead daily entry capacity prices are discounted by 33% and within-day daily entry capacity prices are discounted by 100% under the prevailing methodology
- The Peak Quantity of Entry Capacity Procured
  - The level of firm capacity procured ahead of the gas day is treated as TO revenue. Shippers are not booking up to the forecast supply level in the ten year statement ahead of the gas day.

- The Annual Profile of Entry Capacity Procured
  - The level of capacity procured throughout the formula year relative to the peak level of capacity i.e. the extent of capacity profiling to meet gas flows. The Shipper's ability to buy capacity in daily and monthly quantities means that they can incur lower costs than buying quarterly capacity.
  - The capacity is essentially available 365 days per year and the availability of sub annual products may have the effect of commoditising capacity. If a shipper procures only a handful of days of capacity then the capacity charges will not reflect the annual costs incurred.

Solutions Identified by the Entry Charging Review Group

3.4. A number of potential proposals have been discussed by the Entry Charging Review Group (ECRG). Addressing the significant quantities of entry capacity auctioned at zero reserve price is seen as the priority. Following a request by the ECRG, a discussion paper (NTS GCD 08) was raised to consult on the work carried out to date by the group. The document, responses, and final report can be found on the Gas Charging area of the National Grid website

3.5. Addressing the significant quantities of entry capacity auctioned at zero reserve price could be achieved by the removal of the firm entry capacity discounts and either placing a non-zero reserve price on interruptible capacity or revising the interruptible quantities made available and/or by only releasing interruptible when firm has sold out. The majority of responses to GCD08 favoured removal of the firm discounts, retaining the zero reserve price for interruptible capacity and only releasing interruptible when firm capacity has sold out.

3.6. Consideration of applying price multipliers to daily and monthly capacity has been discussed; however, there is much work to be done before multipliers could be agreed and the group view is that experience of a regime without discounts might better inform this work.

3.7. It is anticipated that price multipliers will be further developed within future ECRG meetings and/or the Gas Transmission Methodologies Forum (Gas TCMF). Ofgem has requested that the review group also, include the consideration of the following areas within the review and it is planned that these will be covered at later meetings.

- spare capacity
- supply scenarios
- a comparison with electricity transmission charging
- the over and under recovery mechanisms

3.8. It is anticipated that the issue of incentivising the use of spare capacity as an alternative to investment can only be addressed through the long term QSEC auctions, as these are the only auctions where incremental capacity can be released.

3.9. Recent developments in electricity have focussed on changing generation (supply) scenarios and any analogous changes to the gas regime could be factored in through changes in inputs to the transportation model.

3.10. Recent development of the over recovery mechanisms has highlighted that redistribution of over-recovery revenue based on capacity holdings may create perverse incentives to over procure capacity.

3.11. For the reasons stated above, National Grid believes that the areas identified by Ofgem can be assessed, discussed and potentially proposals brought forward that would be consistent with the removal of daily entry capacity discounts.

Historical and Future Revenue Analysis

3.12. Appendix A shows the impact that the removal of discounts would have had for the 2008-2009 formula year. This indicates that had the quantities of daily firm capacity been procured at the non-discounted reserve prices they would have resulted in £45m of additional revenue. Had the quantities of interruptible capacity been replaced with firm capacity then this would have resulted in a further £90m of revenue.

3.13. Clearly a change such as the removal of the zero reserved priced capacity would result in changes in behaviour and hence further analysis was carried out looking at gas flow allocations above capacity holdings. This indicates that on an individual shipper basis an additional £71m would have been generated; however, this does not take into account shipper trading and the anticipated stimulus that the removal of discounts should have on the secondary capacity market. Perfect trading out of shipper positions and procurement of capacity to exactly meet gas flow allocations would have resulted in £3m of additional revenue.

3.14. Given a potential change in revenue of between £3m and £71m resulting from the removal of discounts, it would seem prudent to introduce this as an initial phase and assessing the impact prior to introducing any further changes to entry reserve prices.

3.15. Appendix B shows a forward looking analysis that indicates that the removal of discounts will have a significant impact over time in terms of closing the gap between collected entry capacity revenue and target entry revenue; however, the gap is not completely closed and hence further changes may be required.

Entry Capacity Substitution

3.16. Entry capacity substitution is the process of moving “non-incremental obligated entry capacity” from one or more ASEPs to meet the requirement for “incremental obligated entry capacity” elsewhere. The substituted entry capacity is moved to the ASEP where additional capacity is demanded, in preference to creating additional capacity (“funded incremental obligated entry capacity”) which may require investment in new infrastructure. The “non-incremental obligated entry capacity” at an ASEP is made up of baseline obligated entry capacity for the ASEP plus (or minus) any entry capacity that has been substituted to (or from) the ASEP.

3.17. Going forward, entry capacity substitution may have the potential to increase the quantity of Non-incremental (TO) Obligated NTS Entry Capacity sold and hence may increase TO Entry Capacity revenue. Entry capacity substitution should, at least, help to maintain the quantity of Obligated NTS Entry Capacity released i.e. under certain circumstances it may reduce the release of “funded incremental obligated entry capacity” and increase the sale of “non-incremental obligated entry capacity”.

3.18. In addition, funded incremental obligated entry capacity that has been released in long term auctions from 2007 will be treated as non-incremental obligated entry capacity five years after this capacity is first released. While this will increase the TO capacity revenue collected, there will be an anticipated increase in TO allowed revenue as investments associated with the release of the incremental obligated entry capacity are included within the TO regulated asset value and hence the TO allowed revenue.

3.19. Revenue from the sale of “non-incremental obligated entry capacity” is treated as TO revenue, whereas revenue from the sale of “funded incremental obligated entry capacity” is treated as SO revenue.

3.20. The following table shows the impact that substitution might have on the TO commodity charge if 10 Mscm/d of incremental obligated entry capacity was released through substitution, and therefore treated as TO revenue (rather than investment, and treated as SO revenue) for each existing ASEP and booked for two quarters (6 months).

ASEP	Cost of 10 Mscm/d for 6 months/year	Impact on TO Commodity Charge (p/kWh/day)
AVONMOUTH_LNG	£20,020.00	0.0000
BACTON_TERMINAL	£1,781,780.00	-0.0002
BARROW_TERMINAL	£360,360.00	0.0000
BARTON_STACEY_(MRS)	£20,020.00	0.0000
BURTON_POINT_TERMINAL	£20,020.00	0.0000
CAYTHORPE_(MRS)	£2,082,080.00	-0.0002
CHESHIRE_(MRS)	£20,020.00	0.0000
DYNEVOR_ARMS_LNG	£20,020.00	0.0000
EASINGTON&ROUGH_TERMINAL	£2,242,240.00	-0.0002
FLEETWOOD_(MRS)	£480,480.00	-0.0001
GARTON_(MRS)	£2,542,540.00	-0.0003
GLENMAVIS_LNG	£2,402,400.00	-0.0003
HATFIELD_MOOR_(MRS)	£900,900.00	-0.0001
HATFIELD_MOOR_(MRS)	£900,900.00	-0.0001
HOLEHOUSE_FARM_(MRS)	£20,020.00	0.0000
HORNSEA_(MRS)	£2,162,160.00	-0.0002
ISLE_OF_GRAIN_TERMINAL	£520,520.00	-0.0001
MILFORD_HAVEN_TERMINAL	£4,084,080.00	-0.0004
PARTINGTON_LNG	£20,020.00	0.0000
ST_FERGUS_TERMINAL	£7,667,660.00	-0.0008
TEESSIDE_TERMINAL	£2,062,060.00	-0.0002
THEDDLETHORPE_TERMINAL	£2,302,300.00	-0.0003
WYTCH_FARM_TERMINAL	£20,020.00	0.0000

Clearing Obligation

3.21. Currently, National Grid has a Licence reasonable endeavours 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.

3.22. A clearing allocation is defined in the National Grid NTS Licence 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;"

3.23. The Licence states that this obligation 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.

3.24. In 2003, when zero reserve prices were introduced for within-Day firm capacity auctions, it was considered by Ofgem 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.

3.25. 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 UNC) that there may be unutilised firm NTS Entry Capacity on a gas day or at National Grid's discretion.

Licence and UNC Frameworks

3.26. Any change to NTS Entry Capacity reserve price discounts would need to be reflected in National Grid's Gas Transporter Licence in respect of the NTS and would need to be reflected in the Uniform Network Code (UNC). These changes are being progressed under separate governance processes to any Charging Methodology proposals.

3.27. The following aspects are being considered;-

- UNC references to applying a zero price in an entry auction (UNC Modification Proposal 0284)
- UNC calculation of the interruptible quantities released and the basis for such release (UNC Modification Proposal 0285)
- NTS Licence and UNC arrangements relating to the clearing obligation.
- NTS Licence and UNC arrangements relating to the mapping of within-day obligated entry capacity to the SO price control and redistributing this revenue through the entry capacity neutrality mechanism.

3.28. UNC Modification Proposal 0284 is required to remove the zero price references in regard to daily auctions, and this is being progressed via the UNC Transmission Workstream.

3.29. Ofgem has stated in the ECRG meetings that, should a charging proposal that contravenes the clearing obligation be proposed and not vetoed, the granting of a Licence derogation in regard to the clearing obligation could be a short-term solution.

3.30. Within-day obligated entry capacity revenue is mapped to the SO price control within the Licence, while revenue from the sale of obligated entry capacity is mapped to the TO price control for all other entry capacity auctions.

3.31. Treating within-day obligated entry capacity revenue as TO rather than SO, for charge setting purposes, would require a Licence change to convert the mapping from SO to TO, and this would be subject to a UNC change to prevent revenue from the sale of within-day Obligated Daily NTS Entry Capacity feeding capacity neutrality.

3.32. The interruptible quantity is currently defined as the daily average unutilised firm capacity, referred to as the 'use it or lose it' (UIOLI) quantity, plus a discretionary amount of NTS Entry Capacity which National Grid determines.

3.33. The "daily average unutilised firm capacity" for each ASEP is the 30 day average amount by which the Firm NTS Entry Capacity exceeds the delivered quantities (calculated once a week using data 7 days prior to the calculation date i.e. utilising closed out data).

3.34. This calculation could either apply only when firm capacity has sold out and/or be modified.

3.35. The "daily average unutilised firm capacity" is referred to as the 'use it or lose it' (UIOLI) quantity as it was designed as an anti hoarding measure. The scenario where a small quantity of firm capacity remains unsold, and yet the UIOLI quantity implies unutilised capacity, would need to be avoided.

3.36. A detailed solution has been discussed within the UNC Transmission Workstream and UNC Modification proposal 0285 has been raised. This Proposal involves the UIOLI quantity at an ASEP being released only when the unsold firm capacity at the ASEP is less than or equal to 10% of the firm capacity made available.

Further Options

3.37. Shipper's ability to buy capacity in daily and monthly quantities means that they can incur lower costs than buying quarterly capacity even though the National Grid costs incurred in making available a level of entry capacity throughout the year will be the same irrespective of how the capacity is sold.

3.38. This issue could be addressed by applying price multipliers to the calculation of the daily entry capacity prices under the prevailing charging methodology such that prices were greater than 1/365th of the annuitised long run marginal cost (LRMC).

3.39. This is equivalent to dividing the annual cost (the annuitised LRMC) by a duration of less than 365 days. This is not a new approach as a multiplier of 4, relative to the daily rate for annual capacity, was applied when daily entry capacity auctions were first introduced. The same approach could be taken for monthly capacity. This issue will need to be discussed further within the ECRG.

3.40. Given that quarterly capacity long term auctions cover a 17 year period and that these auctions are the primary devise for triggering incremental capacity, the view of the industry is that QSEC capacity pricing should remain unaltered.

Phased Approach

3.41. Through the entry charging review group meetings, shippers have expressed a preference for a phased approach. This would allow the removal of entry discounts and a revised calculation of the quantity of the interruptible capacity made available to be implemented earlier than might otherwise be the case.

3.42. The impact of this first phase could then be assessed before daily multipliers and monthly multipliers were introduced as later phases. This would allow experience of the revised phase one arrangements to be taken into account when setting the values for price multipliers.

3.43. Daily capacity price multipliers might represent part of the second phase with monthly price multipliers representing part of a third phase.

European Comparison

3.44. Through the GTE tariff report published in 2005 it has been possible to compare NTS Entry Capacity tariff setting arrangements with our close European neighbours.

3.45. In summary, based on the countries published within the GTE tariff report, the UK is the only regime where;

- firm capacity is released with a zero reserve price
- interruptible capacity is released with a zero reserve price while firm capacity remains unsold
- daily capacity costs less on a daily basis (p/kWh/day) than monthly capacity
- monthly capacity costs less on a daily basis (p/kWh/day) than annual/quarterly capacity
- less than 50% of entry target revenue is recovered through capacity charges

3.46. Concerns had been raised within the ECRG that only releasing interruptible capacity when firm capacity has sold out may not be consistent with EU regulations; however, the obligation to release interruptible is in the event of contractual constraints and National Grid believes that this would not be the case if firm capacity remains un-sold.

Summary

3.47. Removing daily discounts and considering the introduction of price multipliers such that daily and monthly prices are greater than 1/365th of the annuitised LRMC would make daily capacity more expensive than monthly capacity and monthly capacity more than quarterly capacity. Revisions to interruptible quantities would reduce the availability of minimal priced capacity. As a consequence;

- Capacity revenue would be increased, and hence the TO Entry Commodity charge rate should reduce.
- The incentives to procure further ahead of the day would be achieved without unduly affecting shipper's ability to procure capacity in shorter term auctions.
- Incentives to book longer term would increase and hence incentivise security of supply

3.48. If removal of discounts and revisions to interruptible quantities/release rules were introduced as the first part of a phased approach, this would allow experience of the regime to inform the setting of price multipliers without introducing the risk of over recovery and price fluctuations.

4. Terms of the Original Proposal

4.1. National Grid proposed through GCM19 that:

- The 33% NTS Entry Capacity Reserve price discount for day ahead daily entry capacity (DADSEC) is removed.
- The 100% NTS Entry Capacity Reserve price discount for within-day daily entry capacity (WDDSEC) is removed.
  - As a consequence of the removal of the discounts, day-ahead and within-day Daily NTS Entry Capacity Reserve prices (p/kWh/day) would both be equal to the rolling monthly auction reserve prices
- The revenue from the sale of within-day Obligated Daily NTS Entry Capacity (not redistributed via capacity neutrality) would be treated as TO revenue for charge setting purposes.
  - This would require a Licence change to facilitate the change in revenue treatment and
  - Currently all within day entry capacity revenue is redistributed via capacity neutrality and therefore this would be subject to a UNC change to prevent revenue from the sale of within-day Obligated Daily NTS Entry Capacity feeding capacity neutrality.

<u>Implementation</u>

4.2. It is proposed that these revised reserve price arrangements are implemented in relation to capacity made available from 1st October 2010. A decision would be required at least two months prior to this date (31st July 2010) to allow for the code defined two month notice of charges.

4.3. Associated Licence and UNC changes would be required to implement this proposal (GCM19). The UNC change(s) will be progressed through the UNC Transmission Workstream. While the within-day zero reserve price can be progressed without any systems changes, initial analysis has indicated that any changes to neutrality will require systems changes that could not be delivered for 1st October 2010.

5. Representations Made

5.1. National Grid NTS received 8 responses to the consultation on NTS GCM 19; 5 were in support, and 3 were against. One of the responses was marked as confidential. Copies of the non-confidential responses have been posted on the Gas Charging section of the National Grid information website.[1]

Support for the Proposal

Respondent	Abbr.	View
Exxon Mobil	EM	Support
Statoil (UK) Ltd	STUK	Support
British Gas Trading	BGT	Support
E.ON UK plc	EON	Against
Total E&P	TEP	Support
The Association of Electricity Producers	AEP	Support
EDF Energy	EDFE	Against
Confidential response (1)	-	Against

Summary of Responses by Consultation Question

Q1. Should the discounts that apply to day-ahead (DADSEC) firm daily entry capacity be removed?

Q2. Should the discounts that apply to within-day (WDDSEC) firm daily entry capacity be removed?

Respondents Views

AEP "believes that the discounts for firm capacity products should be removed, therefore setting the price for daily firm capacity, whether that is within day or dayahead at the reserve price for the monthly product. With respect to the daily interruptible reserve price, this is less clear and may be addressed by revising the circumstances in which daily interruptible capacity is released. It may not be prudent to change the price and quantity at the same time."

AEP support the removal of clearing obligation and hence the zero WDDSEC price. AEP comments that "many of the assumptions that led to this being incorporated in NG's licence have with the benefit of hindsight not worked out as anticipated."

EM comments that it is "supportive of the proposed changes to the Entry Charging Regime and the removal of the day-ahead and within-day entry capacity discounts."

[1] GCM19 consultation responses can be found at ;

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

EM "see two key concerns with the current high TO Commodity costs:

i) Price Predictability: A key desire for EM as a gas shipper is to have Transportation costs predictability. The current model in the UK with a high proportion of commodity costs with significant potential variation year on year does not provide that predictability.

ii) Cross Subsidies within the system: As National Grid highlight in section 5.14-5.17, the effect of the current system is leading to shippers increasingly purchasing capacity at discounts leading to increasing commodity costs to manage revenue under recovery and allow National Grid to meet revenue targets. This is causing purchasers of long term capacity to effectively pay twice for capacity and leads to a cross subsidy within the system which is an unwanted consequence of capacity discounts."

EM "believes that to help correct the issues addressed earlier in this response associated with the current high TO commodity charges, the DADSEC and WDDSEC entry capacity discounts should be removed and both prices should be equal to the rolling monthly auction reserve prices."

EDFE "does not believe that there should be any changes to the WDDSEC pricing regime as it is contingent on other reforms which are not being progressed at this stage."

STUK "welcomes the proposals discussed in NTS GCM19 and UNC modification proposal 0284 and supports the removal of the discounts that are currently applied to both the DADSEC and WDDSEC auctions. STUK also understand that should the charging and modification proposals be implemented, Ofgem are to agree to a licence derogation on the obligation on National Grid to provide a clearing auction to for within day capacity a move which STUK also welcome."

STUK comments "The removal of these discounts will go some way to reduce the incentives on shippers to delay the purchase of entry capacity until close to the day of use. This should then encourage the booking of entry capacity in the longer term auctions which will increase auction recovery and help to reduce the TO commodity charge."

BGT "agrees that a revised calculation for day-ahead (DADSEC) and within-day (WDDSEC) firm daily entry capacity should apply such that both prices (p/kWh/day) are equal to the rolling monthly auction reserve prices. We also believe that it is necessary to review the release mechanism and pricing of interruptible capacity."

TEP comments "Discounts should be removed from all auctions and reserve prices should be equal at all auctions for firm entry capacity."

TEP "believe that many of the recent changes introduced by Ofgem (substitution, baselines reduction etc) make the existing Licence Clearing Obligation on NG clearly incoherent with the rest of the UNC/Licence entry capacity framework."

National Grid's View

National Grid welcomes support for this aspect of the proposal and continues to believe that the firm Daily NTS Entry Capacity reserve price discounts should be removed. The UNC Modification proposal to remove the UNC reference to a zero reserve price (UNC 0284) is being progressed and we would anticipate the development of Licence changes should this proposal not be vetoed.

National Grid believes that the level of competition at each entry point and the degree of certainty of NTS entry capacity availability introduced via the introduction of baselines and obligated capacity levels, mean that the discounts and the Licence clearing obligation are no longer appropriate.

National Grid believes that the required Licence and UNC changes required to allow for the implementation of this proposal are being progressed. Changes to Neutrality and Licence revenue mapping may not be required as the incentive to procure within-day capacity compared to day-ahead capacity would be removed as the removal of discounts would remove the price differential.

Q3. Should revenue from the sale of within-day Obligated Daily NTS Entry Capacity (if not redistributed via capacity neutrality) be treated as TO revenue for charge setting purposes?

Respondents Views

EM "believes that the revenue from the sale of within-day obligated NTS entry capacity should be treated as TO revenue."

STUK "is disappointed however that the necessary UNC modification and licence change proposals have yet to be raised to allow the revenue from the sale of within-day obligated NTS Entry Capacity to be treated as TO revenue. Without this change any revenue from the sale of short term entry capacity will not feed into the TO revenue. This will reduce the effectiveness of the removal of the short term entry capacity discounts and lessen the potential decrease in the TO commodity charge."

STUK "supports the proposals in NTS GCM 19 and the associated UNC modification but believes that the necessary changes to the treatment of revenues for the sale of within day capacity (move from SO to TO) should be made as soon as possible to allow the full benefit of implementing the proposals to be felt."

AEP considers that "revenue from obligated capacity should be considered as TO rather than SO revenue, and that this would help to address the under-recovery of revenue."

EON Comments "To date, NG NTS has provided very little analysis on the impact of these changes on neutrality and this issue was only briefly discussed as part of NTS GCD 08. There appear to be some very significant linkages that would be broken if the current arrangements were changed; most notably the impact on buy-backs and SO incentives. For clarity, we do not support any changes to the current neutrality arrangements as proposed here, but welcome further detailed analysis by NG NTS of the impact of altering the current arrangements." EDFE comments "Whilst this appears to be a straight forward change to facilitate implementation of this proposal, we believe that further analysis if required to identify the impacts of this change. In particular we believe that further information and analysis is required to identify what (if any) impact this proposal would have on the SO Incentives, and whether re-classification as TO revenue would reduce the incentive on NGG to maximise the release of entry capacity."

EDFE "note that currently the WDDSEC revenues are treated as SO Revenue and redistributed to Shippers through the capacity neutrality charge. Therefore any changes to WDDSEC pricing will have no impact on the TO Commodity charge until associated changes to NGG's Licence and a UNC Modification proposal are implemented. Whilst it is possible top implement the Licence change prior to 1 October 2010, we understand from discussions with NGG NTS that there is a 6 month lead time associated with the IT systems required to support the changes to capacity neutrality as identified. NGG has commented that they intend to progress the changes to capacity neutrality after implementation of this proposal and the associated Licence changes. This would mean that any revenue from WDDSEC auctions would be returned through capacity neutrality until 1 April 2011 or later."

EDFE "would also note that implementation of this proposal without the associated changes to the capacity neutrality charge could have further unintended consequences of encouraging Shippers to book WDDSEC capacity. This is driven by the fact that the capacity neutrality charge effectively would reduce the cost of purchasing WDDSEC capacity, in proportion to the Shippers entry capacity holdings. For example a Shipper who held 30% of the entry capacity would benefit from a reduction in WDDSEC prices by 30% as a result of the capacity neutrality smear. With changes to the DADSEC charging arrangements this may further encourage Shippers to book WDDSEC capacity. At best this would therefore have a neutral impact on the TO Commodity charge."

EDFE "also believe that further analysis is required to identify how the release of WDDSEC capacity impacts NGG's role as system operator. In particular we would note that in discussions on NTS flexibility, NGG has claimed that flexibility also incorporates NGG's ability to accommodate changes in supply at the day ahead stage. It may therefore be appropriate to continue counting this revenue as SO, if the release of WDDSEC capacity impacts on how NGG runs it compressors and operates the system on a daily basis."

BGT "believe the revenue from the sale of within-day NTS Entry Capacity up to the obligated baseline should be treated as TO revenue for charge setting purposes."

National Grid's View

Should a Licence change be made to define within-day firm non-incremental obligated Daily NTS Entry Capacity revenue as TO revenue, rather than SO as at present, a UNC Modification Proposal to remove this revenue from capacity neutrality would be made. Such a change would result in the charging methodology treating the within-day non-incremental obligated Daily NTS Entry Capacity revenue consistently with all other non-incremental obligated NTS Entry Capacity sales. This would ensure that increased non-incremental obligated Daily NTS Entry Capacity sales resulted in reduced TO Entry Commodity charges.

National Grid notes that part of the intent of the proposals, resulting from the Entry Charging Review, related to encouraging longer term booking and the proposals laid out in this document (GCM19) may result in significantly reduced reliance on within-day capacity sales, which may make changes to the treatment of the resulting revenue of marginal value.

National Grid does not believe that the proposals, and the treatment of within-day firm capacity sales as SO revenue, increase the incentive to procure within-day compared to day-ahead. Procuring ahead of the day would result in reduced TO Entry Commodity charges, either directly or via the TO Entry Commodity rebate. Procurement within-day may result in a reduced benefit to Shippers, compared to procuring day-ahead, due to the combination of capacity neutrality payments and potential increased SO Commodity charges resulting from the Entry Capacity Buy Back mechanism.

Initial analysis has indicated that any changes to capacity neutrality will require systems changes that could not be delivered for 1st October 2010. National Grid has committed to monitoring regime performance post 1st October 2010 and believes that this will inform the development of any subsequent changes to capacity neutrality. The treatment of within-day Daily NTS Entry Capacity revenue forms part of the operational buy back incentive and any changes to revenue treatment and neutrality would also need to be considered in relation to this incentive.

Summary of Responses by Issues Raised

Interruptible Entry Capacity Release

Respondents Views

EM "appreciate that this consultation document does not request a specific response regarding the interruptible release change proposal ongoing within the UNC Transmission Workstream, we feel it is critical to acknowledge the intertwined nature of these proposals and that the removal of the firm pricing discounts is unlikely to have the desired effect without any adjustments to the interruptible quantity release or a revision of the interruptible price discount."

TEP comments "Interruptible capacity prices should indeed reflect the risk of interruption, and if there are still substantial amounts of firm entry capacity unsold we do not believe interruptible capacity should be released at a discount as this would not be cost reflective or promote competition. Only if firm capacity is sold out and there is a risk of interruption should interruptible entry capacity be priced at zero."

National Grid's View

National Grid believes that this proposal (GCM19) and the UNC proposal limiting the release of interruptible capacity to when unsold firm is 10% or less (UNC 0285) are interlinked. Both proposals are seeking to reduce the quantity of zero reserve priced NTS Entry Capacity made available which has been identified as a key factor underlying the high TO Entry Commodity charge. National Grid believes that some benefits would be achieved if this proposal (NTS GCM 19) were implemented without UNC0285; however, the full benefits would only be achieved by implementing both GCM19 and UNC0285.

National Grid recognises that an alternative solution to UNC Modification Proposal 0285 would have been to retain the UNC Daily Interruptible NTS Entry Capacity release rules as they stand, and to change the interruptible reserve price setting methodology to introduce non-zero reserve prices; however, the views expressed by the Entry Charging Review Group were that placing limits on the quantity of interruptible capacity released was the preferred option.

Security of Supply Issues

Respondents Views

EM comments "Security of supply concerns were raised around two key areas; i) that incremental capacity costs will result in the UK being less competitive than other European locations and ii) that restricting interruptible capacity could lead to restricting supplies into the UK due to not being able to access capacity. With regard to the competitiveness issue, we would point out that the UK is already in a position of being less cost competitive that other European locations driven by the high TO commodity charges. As an example, there is a significant Transportation capacity cost difference between moving gas from Norway to the NBP compared to moving gas from Norway to Zeebrugge Hub which is caused by the differing UK and Belgium entry costs primarily driven by the high UK commodity charge. By implementing a system in the UK whereby all users pay for capacity rather than those who have purchased long term capacity the outcome should be a reduction in the TO commodity charge and lowering of overall unit entry costs for the industry resulting in making the UK more competitive and actually increase security of supply."

EM "also do not believe that the restriction on release of interruptible capacity would cause security of supply concerns. By definition if the interruptible capacity is not released because 10% or more firm capacity is available then there is obviously no constraint on acquiring capacity as at least 10% of capacity is available for purchase. If available capacity is less than 10% of total firm capacity, then interruptible capacity will be released in the same manner as the existing process. On this basis we do not see the proposed changes as causing any new issues with regard to security of supply due to capacity not being available and linked with the above paragraph the changes should actually help to promote security of supply."

EDFE comments "Since setting NGG's price control for 1 April 2008 2013 the entry capacity regime has undergone significant and fundamental reform. This has included the re-setting of entry capacity baselines and the implementation of transfer and trade and substitution methodologies. All of these have had a fundamental impact on how Shippers procure and optimise their entry capacity requirements to supply gas to the UK. With developments in Europe regarding the charging for capacity and the mechanism for accessing this capacity, there is a further risk that the UK will also have to undergo further reform in the near future. This level of regulatory uncertainty has reduced the attractiveness of the UK for investment in recent years, an issue that has been raised in public meetings and consultation responses." EDFE comments "Project Discovery has identified the need for significant investment to meet the UK's security of supply requirements. We believe that implementation of this proposal would be in contradiction to the key findings of this project by further adding to the regulatory uncertainty that plights the UK."

"As a major importer of natural gas to the UK, Statoil (UK) Ltd (STUK) is interested in the maintenance of a stable, efficient and economic entry capacity regime. STUK have participated in the long term entry capacity reservation process since its inception and have played an integral part in the development of the regime, booking capacity at both new and existing terminals. We have expressed out commitment to the UK by purchasing long term entry capacity; with a view to potentially committing even further in the longer term should the regulatory conditions remain favourable."

EDFE is concerned that this proposal has "failed to take into account the operational requirements of Shippers that operate offshore fields. In particular we would note that the UK Continental Shelf (UKCS) is in decline, and so there are numerous offshore fields that are nearing the end of their production life. However when operating these fields it is unclear how much longer they will be producing for, and so Shippers will not be prepared to lock themselves into a long term entry capacity product that they may not require. This therefore only leaves shorter term entry capacity products open to these Shippers. However whilst there is greater certainty around the short term requirements this tends not to materialise until the day ahead or within day period. This is driven by the production uncertainty surrounding these fields as they tend to be less reliable and subject to unexpected reductions or increases in production volumes. Increasing the entry capacity costs for these fields is likely to shorten their economic life and result in the closure of these fields earlier than expected. This appears to be in contrast to Ofgem's and the Governments stated position of encouraging production from these fields and maximising the asset life."

EDFE "believes that implementation of this proposal will have a detrimental effect on the UK's security of supply as the impact of this proposal will be felt most greatly by offshore fields that are in decline. This will also have a knock on impact on the tax revenues collected from these fields. This appears to be diametrically opposed to Ofgem's and the Government's stated position on these assets."

EDFE "is also concerned that no analysis has been undertaken on the classes of Shippers that access the "shorter term" entry capacity products and the impact that this methodology may have on these Shippers. In particular we would note that there are numerous Shippers who book entry capacity, including larger "incumbent" producers; small producers who develop niche and declining offshore fields that are unattractive to the "major producers"; traders who contract for physical delivery; and "suppliers" who can arbitrage between markets for the delivery of their gas – such as LNG importers. No analysis has been undertaken as to whether any of these classes of Shipper are more reliant on any particular class of entry capacity. We are therefore concerned that implementation of this proposal could favour certain classes of Shipper over another. This could have a detrimental impact on competition if smaller suppliers are disadvantaged compared to the larger producers. This could have a detrimental impact on security of supplies if gas supplies are diverted to another market as the entry capacity charging arrangements are more attractive. Finally this proposal could reduce the liquidity of the gas market if traders are discouraged from taking short term physical positions to trade against."

BGT comments that "In the case of new incremental capacity, much of which has been built in order to secure imported supplies, the present level of commodity charges acts as a deterrent to bringing supply to the UK market as compared with other competing markets. This consequence poses a potential threat to security of supply."

National Grid's View

National Grid continues to believe that this proposal will represent a positive benefit in terms of security of supply. The proposal is consistent with longer term booking hence increasing the likelihood that required investment signals will be received and reducing the likelihood of constraints becoming material.

Reduced TO Entry Commodity charges and variability should increase the attractiveness of the UK market particularly in terms of longer term contracts. If shippers can factor in lower commodity charges and charge variability then they can reflect that in NBP prices.

The UK is the only European market to auction firm capacity at a zero reserve price. It is hard to understand how this proposal, which is seeking to bring the UK market more in line with other European markets, could create an incentive to divert gas to these other competing markets. National Grid believes that there are stronger arguments to suggest the current high commodity charge is having a negative affect on the attractiveness of the UK market.

Consistency with ERGEG Framework guidelines

Respondents Views

In regard to the ERGEG framework guidelines, EM comments "that the guidelines are focusing on arrangements at interconnectors only, and not all entry points which makes application to the UK uncertain. We also note the guidelines are initial views with further work to come particularly around charging. When comparing interruptible capacity products across Europe, the majority of European systems operate on the premise that interruptible capacity will not be available until firm has sold out, so the current UK system is not harmonised with Europe. Also when looking at the initial ERGEG guidelines, they advocate standardised capacity products which we interpret as no pricing discrimination within a class of capacity products. Firm primary capacity should be offered at the same price irrespective of the time of offering. In summary, the proposed changes are likely to bring the UK system closer in line to other European systems."

EDFE comments that "This proposal fails to take account of developments in Europe, and so runs the risk that this proposal will need to be reversed in the near future." EDFE comments "Developments on the European regulatory regime should be allowed to materialise to ensure that any proposals are consistent with this regime and do not leave the UK in breach of these regulations. NGG should review the options of scaling up entry capacity prices – which is employed in the exit regime – so that they meet allowed revenue. This is the only option that will address the issue of the TO Commodity charge without having a significant detriment on the UK." EDFE "note that this is further exacerbated by developments in Europe, whereby charging regimes and capacity allocation mechanisms are set for fundamental reform. We are therefore concerned that were this proposal to be implemented there is a significant risk that this would have to be reversed in the very near future to ensure compliance with European requirements. Given the over arching requirements that will be imposed on the UK by European developments EDF Energy believes that implementation of any charging modification be delayed until it is clear what the European requirements are. This will reduce regulatory uncertainty for Shippers and ensure that they are not exposed to a continuous stream of regulatory change."

AEP "would support a phased approach with sufficient time between stages to fully assess the impact the change has had, we anticipate this may be more than a year rather than a few months. We consider that any reforms should be mindful of progress on EU framework guidelines for capacity allocation and tarification and comitology proposals for congestion management. These could impact the UK arrangements in 2011. Whilst some of these changes may only apply at congested interconnection points, consideration would need to be given as to whether all entry points should have similar products and charging principles or whether potentially different rules could apply at interconnection points and other points. This may be particularly relevant in relation to price multipliers, since ERGEG's current proposals do not favour these."

National Grid's View

National Grid continues to believe that this proposal is consistent with current European regulations and it should ensure increased cost reflectivity across the charges and charging methodology and reduce potential cross subsidies. The proposal should also remove any incentives to procure more capacity than is required.

National Grid understands that the ERGEG proposals, referred to by a number of respondents, apply only to interconnection points and that the charging principles contained within those documents are only initial thoughts.

National Grid will be involved within the proposed ERGEG tarification Workstream which will be looking to develop common charging principles, which would then be consulted on at a later date. Once agreed, these principles may lead to consequential NTS Charging Methodology change proposals which would then be subject to the prevailing consultation process.

Multipliers

Respondents Views

"E.ON UK's position remains unchanged from that set out in detail in response to NTS GCD 08. We are strongly against these proposals and are unconvinced by the supporting arguments for change, which seem to rely on the benefits that would be brought about primarily by introducing further changes, such as multipliers; despite not being part of this particular proposal. It is unclear how much of the benefits identified by National Grid NTS (NG NTS) would accrue from introducing multipliers and how much can be attributed solely to removal of the short-term discounts. Given that the concept of multipliers has yet to be even discussed in-depth and the success of the overall package seems to depend primarily on the effect of them (theoretically driving more long-term capacity bookings), we cannot see how this change alone – which will impose significant costs for Shippers – can be justified."

EON comments "If we get to the point where multipliers are determined to not be a viable option (as was the case when multipliers were retired as a concept following NTS charging consultation PC 49 – "Prices for unsold monthly capacity and floor prices for daily capacity Auctions"), then very little will have been be achieved in terms of reducing the TO Entry Commodity charge, but serious costs imposed. Moreover, if the benefits from this change amount to the lower end of NG NTS's scale (c. £3M), then the increased costs to Shippers will significantly outweigh the benefits. With this in mind, we look forward to the Ofgem Regulatory Impact Assessment examining both the benefits and the costs in depth and considering the proportionality of the changes proposed."

TEP "believe that the removal of entry capacity discounts and the limited release of interruptible capacity are changes long overdue and urgently needed. Once this is in place we should start looking at the introduction of multipliers, always in line to achieve cost reflectivity, efficiency and competition amongst shippers."

BGT believe "that the proposed measures will only serve to stop the proportion of TO entry target revenue recovered through entry capacity charges from reducing still further. While we support a phased implementation approach we do believe that Phase 2, with measures designed to increase the entry capacity charge revenue to around [75%] and make the commodity charge more cost reflective should follow shortly after Phase 1. There is little justification for delay to Phase 2 when the impact of the Phase 1 measures will of necessity be limited because the auctions are failing to sell sufficient capacity. It is the potential for further phases afterwards in order to bring capacity revenue more or less into line with target which will have to be assessed in the light of experience."

National Grid's View

National Grid notes that this proposal (GCM19) will not necessarily remove the TO Entry Commodity charge but represents a necessary step within the process of reducing the charge. Further steps may involve the reintroduction of price multipliers.

National Grid notes that the reintroduction of price multipliers is subject to further industry development and this might be better informed by experience of the entry regime with firm entry capacity discounts removed.

Price multipliers formed part of the charging arrangements prior to the introduction of baselines and long term auctions. The multipliers were removed due to revenue over recovery experienced at an early stage of NTS Entry Capacity auctions, due largely to capacity constraints and the perception of constraints.

The combination of incremental release through long term auctions, the transparency associated with baselines, and National Grid' entry capacity release obligations have largely resulted in a period of under recovery. Over-recovery might only reoccur if required investment signals were not received and constraints became material leading to bidding in excess of reserve prices.

This proposal, and the potential reintroduction of price multipliers, should encourage longer term booking and increase capacity revenue which should reduce the prevailing under recovery. Increased longer term bookings should increase the likelihood of required investment signals being received, and hence should reduce the likelihood of constraints and therefore over-recovery returning.

Market Liquidity

Respondents Views

EDFE comments that "This proposal could have a detrimental impact on prompt liquidity and NBP volatility by reducing the attractiveness of the UK for marginal gas supplies." EDFE comments that "Implementation of this proposal will reduce the attractiveness of maintaining declining offshore fields and so reduce the longevity of these fields. This will have a detrimental impact on the UK's security of supply and tax revenue." EDFE comments "When planning investments to supply gas to the UK, Shippers and developers require a stable regulatory regime so that they can appraise their investment and take a sound financial decision."

BGT notes "A further benefit from the proposed measures should be increased liquidity in the market for secondary capacity, whether through trade and transfer or direct trading of capacity between shippers. This activity will no longer be undermined by the availability of low price firm entry capacity."

EM "has a diverse and flexible portfolio which requires us to make both long term and short term capacity commitments. We do not see these proposed changes as establishing an incentive to make long term capacity commitments, it merely establishes level pricing between the short term and long term products. We fully expect that a proportion of capacity would be purchased in the short term and fail to see how such changes would have any significant impact on UK market liquidity or the ability to trade short term products."

National Grid's View

National Grid continues to believe that this proposal (GCM19) will have a positive impact on the secondary entry capacity market. Under the prevailing arrangements, a shipper wishing to procure capacity close to the day will have little incentive to trade due to the primary product discounts and therefore the removal of these discounts should stimulate the secondary capacity market.

National Grid does not believe that this proposal (GCM19) will have a detrimental impact on prompt liquidity and NBP volatility as the increased daily capacity charges should be offset by reduced commodity charges and therefore there will be a net zero change in transportation charges reflected in prices at the NBP.

Entry Commodity Charge Level and Under/Over Recovery

Respondents Views

EON comments "it should be recognised that fluctuating commodity charge levels are an inevitable outcome when auctions are used to collect fixed allowed revenue. This issue is simply an illustration of the inefficient nature of auctions and it is not inconceivable that in a few years we will be considering ways to better manage overrecovery by NG NTS. In fact, this situation arose only a few years ago when a transportation constraint existed in the Easington area resulting in significant over-recovery of auction revenues. As a result, we believe these proposals are short-sighted and an over-reaction to the current under-recovery situation. As previously stated, it is predictability not less volatility which is the most important outcome when setting Transportation charges and we do not believe this proposal helps in furthering that important objective."

EDFE "would also note that at this stage the requirement for this change is not clear. As previously noted the UK entry capacity regime has undergone significant and fundamental change in recent years. All of these reforms have encouraged Shippers to book long term capacity products if possible, as there are significant risks associated with relying on shorter term capacity products that may not be available when required. However due to the lead time associated with QSEC bookings, these reforms will not feed through in to TO revenue recovery for another year or so. In addition the move from pricing based on UCAs to LRMCs is also due to start feeding through into revenue recovery for NGG in future years. Combined these proposals will increase the revenue recovered from capacity auctions and so reduced the size and impact of the TO Commodity charge. EDF Energy believes that in light of these developments no reforms should be put forward until the industry has a clearer understanding of the impacts of these changes on revenue. Implementation now would run the risk of NGG moving from an under recovery to over recovery in the near term."

National Grid's View

National Grid does not believe that this proposal (GCM19) will lead to capacity revenue over-recovery. Analysis presented at the Entry Capacity Review Group (ECRG) meetings has indicated that National Grid would need to sell out entry capacity up to the ten year statement forecast levels close to 365 days per year to over recover through entry capacity sales.

National Grid believes that one of the key drivers for the ECRG proposing a phased approach was to avoid moving from under recovery to over recovery and hence price multipliers have not been proposed as part of this phase.

User Commitment and Longer Term Capacity Booking

Respondents Views

EM "feel it is not accurate to believe that the proposed changes will automatically lead to people booking all their capacity on a long term basis. What the changes will result in is the removal of the pricing incentive to wait and purchase capacity on the day to realise the significant pricing discounts. What will remain is the incentive to wait and purchase capacity within month in order to match capacity more closely to a shipper's production or import profile. We would expect the majority of shippers to continue to exercise this profiling flexibility and acquire capacity on a short term basis."

EM comments "As we draw upon our European market experience, we see the fundamental obstacle to new entrants in entering markets is the base availability of capacity to purchase. This is not the case in the UK market where significant available capacity is available to purchase at the majority of entry points if a new entrant wished to gain access to the market. In addition there are frequent opportunities for this capacity to be purchased on a daily, monthly and annual basis."

EM "do not feel these changes will force shippers into buying all their capacity needs in the QSEC auctions and still expect capacity to be available at the majority of entry points for booking on a short term basis."

TEP "supports the principle of a national transmission network which is appropriate to demand for entry capacity and which is run in a cost efficient manner. To this end we support the objective of having user commitment as a signal for future capacity requirements. We are concerned that the current entry capacity charging mechanism does not encourage shippers to make long term commitments for entry capacity, thus providing the necessary investment signals to NG, and instead incentivises shippers to wait for the short-term auctions where they can buy capacity at zero or close to zero reserve prices. "

TEP “believe that the objectives of the review are appropriate. We believe that maximising the proportion of allowed revenue recovered from entry capacity sales rather than through commodity charges is particularly important. At the moment NG expects to recover 39% of allowed revenue for 2009/2010 from the sale of entry capacity whilst the remaining 61% will come from the application of the T.O commodity charge. We believe that this is a worrying sign. The T.O commodity charge was introduced as a corrective mechanism which would bridge the gap of any small under-recoveries, but has now become the vehicle through which most of the T.O revenue is collected.”

TEP comments “The objective of promoting long-term bookings was deemed controversial at the review groups organized by NG and Ofgem. Total E&P believes that there is benefit to promoting long term commitment from shippers, namely the accurate and efficient investment by NG. Over recent years Ofgem has highlighted their preference for shipper commitment and introduced licence changes to promote long term commitment by shippers (reduction of baselines, substitution, reduction of held back capacity from 20% to 10% etc.) In line with these it seems incoherent and perverse to maintain discounts on entry capacity prices closer to the flow date. “

National Grid’s View

National Grid believes that current discounts for short term NTS Entry Capacity at existing entry points disincentivise Users to procure entry capacity in longer term auctions potentially undermining investment signals. Removal of these discounts represents a step towards greater consistency with user commitment.

National Grid 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.

Summary of Responses by Relevant Objective

Cost Reflectivity

Respondents Views

AEP "notes that the variability in the TO commodity charge arises from the auctioning of entry capacity as a way of recovering fixed allowed revenues, therefore it is inevitable that the charge will be volatile. It may also be the case in the future that changes to other aspects of the regime, possibly prompted by EU legislation, lead to the return of an over-recovery situation. However AEP considers that reducing the TO commodity charge would reduce the amount of revenue being collected through non-cost reflective commodity charges, these charges are not directly set via an auction and therefore should be cost reflective, which is not the case. It could also be argued that reducing the TO commodity charge could help to avoid the potential for cross-subsidies between long term and short term capacity holders and firm and interruptible capacity holders. Such cross subsidies could also have detrimental effects on competition and suppress incentives to secure long term capacity which may be at odds with the aspect of the EU Gas Regulation that suggests tariffs should take into account the need for system integrity and improvement and provide incentives for investment. Alongside this we are also mindful that the availability of some short term products at relatively low costs can promote security of supply and enable effective management of supply portfolios."

AEP comments "It would also be the case that any reduction in commodity charges would be achieved by an increase in revenues being recovered through capacity charges which we believe is a more appropriate way of recovering fixed costs."

TEP comments "It is crucial that those shippers who commit long term are not penalized for doing so, which is the problem of the current system. We believe that entry capacity prices should be cost reflective, and from NG's presentations at the Workstreams we understand that currently this is not the case. Capacity is priced as an anuitized product and unless a shipper buys 365 days worth of capacity the cost-reflectivity requirement, which is also a Licence requirement, is not met. The problem is exacerbated in the short term auctions as they offer shippers the possibility to profile the capacity bought. Removing the discounts and allowing all capacity to be offered at the same reserve price at all auctions is certainly a step in the right direction, but from the Workstreams we understand that more will be needed in order to make charges truly cost-reflective."

BGT "fully supports the work which has been done to date by the Entry Capacity Charging Review Group and the changes proposed in Phase 1 but believes that these represent a first step towards meeting the objective of minimising the proportion of the TO Entry allowed revenue collected through commodity charges. We are of the view that the current charging structure leads to high and volatile commodity charges, which in turn lead to revenue recovery being far from cost reflective. In this respect National Grid Gas is consistently failing to meet an important licence objective."

BGT comments "While we would ideally want better prediction of the TO commodity charge this should not be at the expense of keeping the charge at anything like its current level, which serves only to commoditise a charge when, in order to achieve true cost-reflectivity, this should be a capacity charge. A high level of TO commodity charge is likely to be passed through to consumers, except those large users who can benefit from short-haul tariffs, and stifles competition whereby users of lower cost entry points can offer consumers beneficial tariffs."

BGT comments "All of the discounts serve to perpetuate the incentive for behaviour to secure capacity at a price below the true cost, without any risk of capacity not being available. We believe that the measures proposed are required in order to introduce cost-reflective pricing and incentivise appropriate shipper behaviour."

National Grid's View

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.

If NTS Entry Capacity auction reserve prices are not set on a cost reflective basis, through the application of discounts, the costs not collected through the auction process will be collected through TO Entry Commodity Charges. National Grid believes that this raises the issue that if prices established through auctions are not cost reflective then TO Entry Commodity Charges may not be cost reflective.

Removal of discounts would mean that the costs incurred in making transportation capacity available at an ASEP would be recovered through Entry Capacity charges levied on capacity holders at the relevant ASEPs. TO Entry Commodity Charges could be reduced and hence charges overall would be more cost reflective.

Promoting Efficiency and Avoiding Undue Preference (Cross Subsidies)

Respondents Views

EM comments that "The proposed changes will actually create a more balanced system and level playing field and remove the current inherent discriminatory pricing for shippers who choose to book a part of their capacity longer term or are forced to under UNC rules for new supply points."

"In its response to PC78, the consultation on the introduction of the TO commodity change (in July 2004), STUK expressed concern that the creation of the TO commodity charge would create cross subsidies between Users and a disincentive to book long term at a number of terminals. We are now in a position where this is the case with Shippers such as Statoil, that participate in the long term auctions and provide National Grid with the appropriate investment signals, subject to the application of an ever increasing TO commodity charge. The application of the charge to all capacity holders regardless of when the capacity is purchased results in some Shippers in effect paying twice for capacity and cross subsidising those Shippers buying capacity for low or zero cost nearer the gas day."

TEP Comments "For the past eight years we have seen National Grid (NG) face T.O under-recovery year on year due to weak participation in the longer term auctions. We see shippers at certain entry points buy substantial amounts of capacity on the day-ahead and within day auctions, forcing NG to apply ever increasing TO Commodity Charges to compensate for the under-recovery, with the added problem that this charge is smeared across all shippers leading to cross-subsidies amongst shippers and the dilution of cost-reflectivity. "

TEP Comments "After participating actively in the Discussion Workgroups set up at Ofgem during 2009 and 2010 we believe that the most reasonable step towards tackling these problems is to remove the existing discounts on short term auction entry reserve prices and the Licence Obligation on NG to offer capacity at zero reserve price on at least one clearing auction. Taking this first step could help to:

- Stop cross subsidies between shippers and promoting competition,
- Have cost reflective prices,
- Avoid undue preference in the supply of transportation services by NG,
- Complying with EU Regulation 1775/2005"

TEP "are confident that implementation of the discussed measures would better facilitate the Licence Objectives of achieving cost-reflectivity, promoting efficiency and avoiding undue preference. "

TEP comments “Removing the existing discounts will lead to charges paid by shippers being more accurate and cost reflective of their actual use of the system. It will also avoid the current situation where some shippers (who book entry capacity long term or new entrants) subsidise the use of entry capacity for other shippers (those who wait and buy at zero or discounted prices). Having all shippers pay a cost-reflective price for the capacity they use means NG avoids undue preference in the provision of transmission services which will help competition between existing shippers to the benefit of gas consumers.”

National Grid’s View

National Grid believes that Shippers have an incentive to ‘wait and see’ due to entry capacity price discounts on day ahead and within-day auctions. Any shortfall in the recovery of revenues by National Grid through entry charges is picked up through the Commodity Charge paid by all shippers. National Grid agrees that this creates the potential for cross subsidies between shippers who buy long term rather than short term and potential undue discrimination for new ASEPs which have no access to zero priced capacity as there are initially no short term auctions.

New entry points may be at a disadvantage in that no short term discounted capacity is available prior to incremental capacity being released through a long term QSEC auction. Effectively new participants who are not able to benefit from the entry discounts may, through the TO Entry Commodity Charge, be cross-subsidising existing participants. The GCM19 proposals should go some way to removing these potential cross subsidies.

6. Changes to the Proposal in the 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 GCM19 consultation process.

6.2. National Grid notes that the treatment of revenue from the sale of within-day Obligated Daily NTS Entry Capacity (not redistributed via capacity neutrality) as TO revenue is dependent on a Licence and UNC change. This was included within the proposal as a clarification of how the charging methodology would automatically treat these revenues should the relevant Licence and UNC neutrality changes be made. The final proposal is detailed in Section Seven below.

7. Final Proposal

7.1. National Grid proposes through GCM19 that:

- The 33% NTS Entry Capacity Reserve price discount for day ahead daily entry capacity (DADSEC) is removed.
- The 100% NTS Entry Capacity Reserve price discount for within-day daily entry capacity (WDDSEC) is removed.
    - As a consequence of the removal of the discounts, day-ahead and within-day Daily NTS Entry Capacity Reserve prices (p/kWh/day) would both be equal to the rolling monthly auction reserve prices

National Grid notes that;

- The revenue from the sale of within-day Obligated Daily NTS Entry Capacity (not redistributed via capacity neutrality) would be treated as TO revenue for charge setting purposes.
    - This would require a Licence change to facilitate the change in revenue treatment and
    - Currently all within day entry capacity revenue is SO revenue and is redistributed via capacity neutrality and therefore this would be subject to a UNC change to prevent revenue from the sale of within-day Obligated Daily NTS Entry Capacity being treated as SO and feeding capacity neutrality.

<u>Implementation</u>

7.2. It is proposed that these revised reserve price arrangements are implemented in relation to capacity made available from 1st October 2010. A decision would be required at least two months prior to this date (31st July 2010) to allow for the code defined two month notice of charges.

7.3. Associated Licence and UNC changes would be required to implement this proposal (GCM19). The UNC change to remove references to the within-day zero reserve price (UNC Modification Proposal 0284) is being progressed through the UNC Transmission Workstream. While the within-day zero reserve price can be progressed without any systems changes, initial analysis has indicated that any changes to neutrality will require systems changes that could not be delivered for 1st October 2010.

8. Justification

8.1. This section presents the views of National Grid in respect of the extent to which the proposals set out under section 4 would achieve the relevant methodology objectives under the National Grid NTS GT Licence and the EU Gas Regulations (as summarised in Appendix D. – Relevant Objectives).

8.2. National Grid 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 100% discount for within-Day firm capacity was introduced to meet this Licence obligation; however, National Grid has reviewed the impact of these discounts and believes they are no longer consistent with the wider Licence obligations.

Cost Reflectivity

8.3. 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.

8.4. 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.

8.5. Removal of discounts, in combination with the application of the Gas Charging Transportation Model (as introduced by NTS GCM 01), would mean that the costs incurred in making transportation capacity available at an ASEP would be recovered through Entry Capacity charges levied on capacity holders at the relevant ASEPs. TO Entry Commodity Charges could be reduced and hence charges overall would be more cost reflective.

Promoting Efficiency

Investment Signals

8.6. National Grid believes that current discounts for short term NTS Entry Capacity at existing entry points disincentivise Users to procure entry capacity in longer term auctions.

Stability

8.7. Discussions with the industry have indicated that stable, or at least predictable, prices are preferable. National Grid is concerned that the industry desire for stable and predictable prices is not fulfilled by discounting capacity prices in the short term.

8.8. 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.

8.9. National Grid 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

Potential Cross Subsidies

8.10. Potentially Shippers have an incentive to 'wait and see' due to entry capacity price discounts on day ahead (33%) and within-day (100%) auctions. Any shortfall in the recovery of revenues by National Grid through entry charges is picked up through the Commodity Charge paid by all shippers. This could mean that short term capacity buyers are having their costs paid by shippers who have previously paid the longer term rate for capacity.

8.11. It could be argued that this creates;

- cross subsidies between shippers who buy long term rather than short term,
- cross subsidies between shippers who buy firm rather than interruptible,
- interruptible capacity that is effectively firm if firm capacity remains unsold,
- potential undue discrimination for new ASEPs which have no access to zero priced capacity as there are initially no short term auctions

8.12. New entry points may be at a disadvantage in that no short term discounted capacity is available prior to incremental capacity being released through a long term QSEC auction. Effectively new participants who are not able to benefit from the entry discounts may, through the TO Entry Commodity Charge, be cross-subsidising existing participants.

8.13. 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.

Secondary Market

8.14. Reserve price discounts may be a factor that inhibits entry capacity trading at ASEPs when there is unsold Obligated NTS Entry capacity. Some Users may have surplus capacity holdings and others are seeking short term rights but the value of sold capacity is destroyed by the existence of zero priced capacity.

8.15. Users with surplus capacity holdings purchased in long term auctions are inhibited from trading away their surplus due to the substantially discounted primary capacity made available to other Users. Removal of discounts should promote the secondary market in entry capacity.

Competition

8.16. The use of LRMC based prices should 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 affect 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 buy-back costs and TO Entry Commodity Charges.

8.17. Removal of the discounts should help to avoid cross subsidies and the constraints resulting from missed investment signals which should promote competition within the wider gas supply market.

Appendix A. – Historic Analysis

The following analysis was presented at the 11th November 2009 entry charging review group meeting. The analysis looks at the revenue that National Grid would have collected from April 2008 to March 2009 if entry capacity discounts were removed.

This table shows the revenue that was collected through the Day Ahead Daily System Entry Capacity (DADSEC), Within-Day Daily System Entry Capacity (WDDSEC) and Daily Interruptible System Entry Capacity (DISEC) auctions from April 2008 to March 2009.

ASEP	DADSEC (£)	WDDSEC (£)	DISEC (£)	Total (£)
AVONMOUTH LNG	1,078.00	27.00	570.00	1,675.00
BACTON	412,744.79	39,984.17	84,377.14	537,106.10
BARROW	2,018.40	411.70	3,359.00	5,789.10
BARTON STACEY	0.00	0.00	0.00	0.00
BURTON POINT	0.00	0.00	0.00	0.00
CHESHIRE	0.00	0.00	0.00	0.00
DYNEVOR ARMS LNG	730.40	64.00	250.00	1,044.40
EASINGTON & ROUGH	161,342.32	20,595.08	237,811.28	419,748.68
GARTON	0.00	0.00	0.00	0.00
GLENMAVIS LNG	1,071.00	240.00	830.00	2,141.00
HATFIELD MOORS ONSHORE	0.00	0.00	0.00	0.00
HATFIELD MOORS STORAGE	0.00	989.40	178.80	1,168.20
HOLEHOUSE FARM STORAGE	0.00	0.00	0.00	0.00
HORNSEA STORAGE	11,787.50	8,248.44	3,478.41	23,514.35
ISLE OF GRAIN LNG	130.80	55.00	0.00	185.80
MILFORD HAVEN	0.00	0.00	0.00	0.00
PARTINGTON LNG	11,711.42	112.32	560.50	12,384.24
ST FERGUS	29,460.00	11,379.13	16,792.80	57,631.93
TEESSIDE	12,802.50	2,512.50	2,806.69	18,121.69
THEDDLETHORPE	70,198.04	8,501.61	21,531.81	100,231.46
WYTCH FARM ONSHORE	0.00	0.00	0.00	0.00
Total	715,075.17	93,120.35	372,546.43	1,180,741.95

The following table shows the revenue that would have been collected through the DADSEC, WDDSEC and DISEC auctions if MSEC reserve prices had been applied on a daily basis (p/kWh/day) from April '08 to March '09.

ASEP	DADSEC (£)	WDDSEC (£)	DISEC (£)	Total
AVONMOUTH LNG	1,078.00	35,347.76	7,169.60	43,595.36
BACTON	628,003.33	8,864,929.64	10,505,411.05	19,998,344.03
BARROW	3,046.60	29,815.20	1,504,457.96	1,537,319.76
BARTON STACEY	0.00	0.00	0.00	0.00
BURTON POINT	0.00	0.00	0.00	0.00
CHESHIRE	0.00	0.00	0.00	0.00
DYNEVOR ARMS LNG	388.40	6,410.20	4,284.80	11,083.40
EASINGTON & ROUGH	231,244.20	2,122,925.93	10,179,165.94	12,533,336.07
GARTON	0.00	0.00	0.00	0.00
GLENMAVIS LNG	1,602.00	3,819,354.48	376,409.95	4,197,366.44
HATFIELD MOORS ONSHORE	0.00	0.00	6.60	6.60
HATFIELD MOORS STORAGE	0.00	5,406.50	2,331.30	7,737.80
HOLEHOUSE FARM STORAGE	0.00	0.00	121.62	121.62
HORNSEA STORAGE	17,538.40	2,933,209.51	4,254,167.93	7,204,915.84
ISLE OF GRAIN LNG	130.80	21,470.10	10,277.14	31,878.04
MILFORD HAVEN	0.00	0.00	0.00	0.00
PARTINGTON LNG	11,522.42	12,689.09	5,994.09	30,205.60
ST FERGUS	44,145.00	21,979,573.57	54,062,455.49	76,086,174.05
TEESSIDE	19,090.00	2,231,236.66	4,636,341.87	6,886,668.53
THEDDLETHORPE	107,188.22	2,085,565.99	4,505,127.65	6,697,881.87
WYTCH FARM ONSHORE	0.00	0.00	0.00	0.00
Total	1,064,977.38	44,147,934.63	90,053,722.99	135,266,635.00

This table shows the revenue that would have been collected from capacity procured at each ASEP to match allocations above monthly capacity bookings (i.e. the minimum net quantity of capacity required at each ASEP to match allocations) from April '08 to March '09 if MSEC reserve prices had applied. The full effect of Shippers with allocations above or below their monthly capacity bookings (i.e. the minimum quantity of capacity required by each shipper to avoid over-runs) is hidden by the aggregation of the results by ASEP; It therefore assumes "near perfect" trading.

ASEP	Revenue from Monthly Capacity Bookings (£)	Revenue from Allocations Above Monthly Capacity Bookings if MSEC Prices were Applied (£)	Total
AVONMOUTH LNG	730.00	391.88	1,121.88
BACTON	18,230,396.12	2,305,893.66	20,536,289.78
BARROW	606,299.38	0.00	606,299.38
BARTON STACEY	0.00	0.00	0.00
BURTON POINT ONSHORE	21,763.16	0.00	21,763.16
CHESHIRE STORAGE	12,982.60	0.00	12,982.60
DYNEVOR ARMS LNG	13,761.20	126.63	13,887.83
EASINGTON	52,611,219.68	475,723.30	53,086,942.98
GARTON	2,759,400.00	0.00	2,759,400.00
GLENMAVIS LNG	128,948.00	31,516.28	160,464.28
HATFIELD MOORS ONSHORE	2,809.26	0.00	2,809.26
HATFIELD MOORS STORAGE	213,813.61	1,067.25	214,880.86
HOLEHOUSE FARM STORAGE	35,532.98	0.00	35,532.98
HORNSEA STORAGE	1,982,307.14	262,930.89	2,245,238.03
ISLE OF GRAIN LNG	8,300,386.00	422.67	8,300,808.67
MILFORD HAVEN	20,332,048.00	0.00	20,332,048.00
PARTINGTON LNG	730.00	746.27	1,476.27
ST FERGUS	104,166,120.43	0.00	104,166,120.43
TEESSIDE	5,068,805.42	0.00	5,068,805.42
THEDDLETHORPE	2,275,260.96	189,709.38	2,464,970.34
WYTCH FARM ONSHORE	0.00	0.00	0.00
Total	216,763,313.94	3,268,528.22	220,031,842.16

This table shows the revenue that would have been collected from gas flow allocations above monthly capacity holdings from April 2008 to March 2009 if MSEC reserve prices were applied. Data for revenue from gas flow allocations above monthly capacity bookings, if MSEC reserve prices were applied, has not been shown at ASEP level to protect confidentiality.

The volume of capacity in excess of monthly capacity holdings has been calculated for each individual Shipper Licensed entity before being aggregated for each ASEP. The results do not take account of shipper trading of capacity.

ASEP	Revenue from Monthly Capacity Bookings (£)	Revenue from Daily Capacity Bookings (£)	Revenue from DADSEC, WDDSEC and DISEC auctions if MSEC prices are applied (£)	Revenue from Gas Flow Allocations Above Monthly Capacity Bookings if MSEC Prices were Applied (£)
BACTON	18,230,396.12	537,106.10	19,998,344.03	
BARROW	606,299.38	5,789.10	1,537,319.76	
EASINGTON & ROUGH	52,611,219.68	419,748.68	12,533,336.07	
ST FERGUS	104,166,120.43	57,631.93	76,086,174.05	
TEESSIDE	5,068,805.42	18,121.69	6,886,668.53	
THEDDLETHORPE	2,275,260.96	100,231.46	6,697,881.87	
Total	**182,958,101.99**	**1,138,628.96**	**123,739,724.31**	**71,137,977.39**

Appendix B. – Forward Looking Analysis

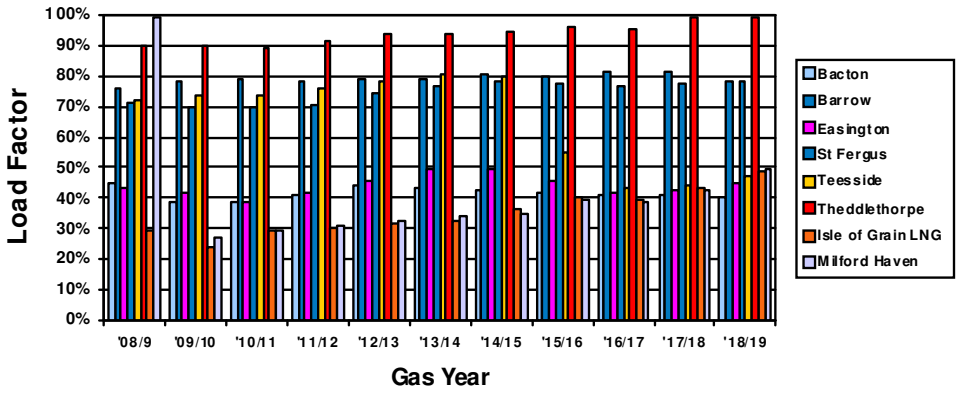
The following analysis approach has been presented at the entry charging review group meetings between September and November 2009. The following analysis covers a forecast of entry capacity revenue going forward taking into account the potential removal of daily capacity discounts. The graphs and data have been updated for the latest (2009 Ten Year Statement) forecast of supplies.

The assumptions required in order to forecast entry capacity revenue are

- Forecast peak supply levels
- Forecast supply profiles
- Capacity sold
- Capacity requirement

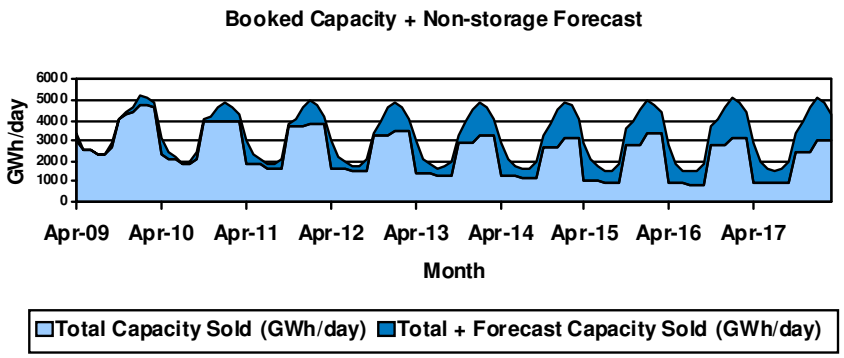
The 2009 Ten Year Statement (TYS) provides forecast peak and annual supply data but experience indicates that capacity for peak supplies will not be procured 365 days per year. In order to forecast future capacity revenue, a process for forecasting capacity profiles is required.

The following graph shows the TYS load factor for each ASEP. The Load Factor equals the ratio of average daily supply to peak supply. The average daily supply is calculated from the annual forecast divided by 365.

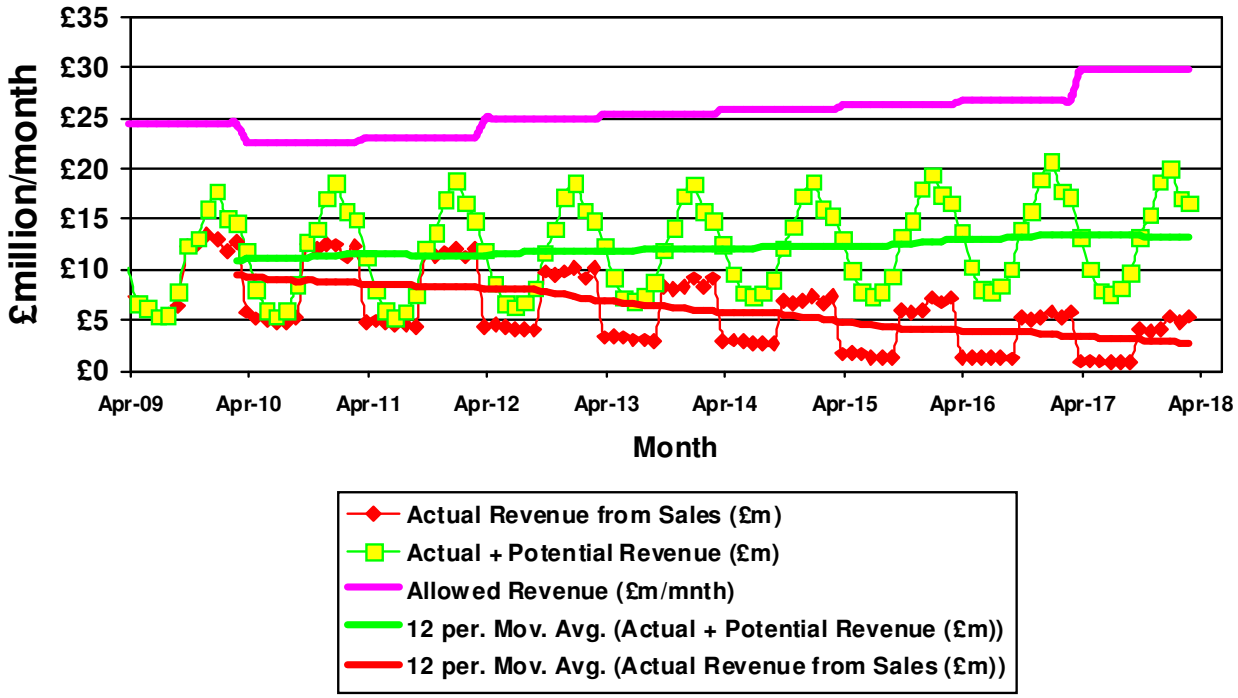


To take the "load-factor" into account, a capacity profile, with the maximum equal to the forecast maximum supply and average equal to the forecast annual supply, can be fitted for each ASEP. The maximum supply is assumed to be in January and equals the peak supply; as a consequence, the minimum supply is in July. The maximum capacity equals the peak supply unless the load factor is less than 50%. If load-factor is less than 50%, the January capacities are scaled down to avoid a negative supply in July; this would occur as a consequence of the profile of capacity across the year equalling the annual supply forecast.

The following graph shows this forecast capacity profile for all non-storage ASEPs.



Forecast capacity required for all beach ASEPs has been calculated on this basis. Capacity is assumed to be procured to exactly meet forecast supply and paid for. 2009 QSEC prices have been used as the latest forecast of future prices.



The forward looking analysis suggests that, assuming the removal of entry capacity discounts and capacity requirements procured as firm, entry capacity revenue will increase as more capacity is procured based on prices generated from the Transportation Model. It should be noted that prior to 2007 prices were based on UCAs and were on average 33% lower compared to the prevailing prices. Removal of discounts will not necessarily completely remove the shortfall between TO target entry revenue and TO entry capacity revenue (depending on shipper booking behaviour).

The following table shows the potential impact on the TO Entry Commodity charge from the analysis above.

Formula Year	Actual Revenue from Sales (£m)	Actual + Potential Revenue* (£m)	Allowed Revenue (£m)	Revenue Shortfall (£m)	Estimated TO Entry Commodity Charge (p/kWh)
April 09 to March 10	£113.4	£130.4	£293.4	£163.0	0.0179
April 10 to March 11	£104.0	£138.6	£271.3	£132.7	0.0145
April 11 to March 12	£98.1	£136.5	£277.1	£140.6	0.0154
April 12 to March 13	£84.0	£140.6	£298.8	£158.2	0.0173
April 13 to March 14	£70.4	£144.2	£304.3	£160.1	0.0175
April 14 to March 15	£59.1	£147.5	£309.9	£162.4	0.0178
April 15 to March 16	£47.8	£155.1	£315.4	£160.3	0.0176
April 16 to March 17	£40.2	£162.5	£320.9	£158.4	0.0174
April 17 to March 18	£32.8	£157.7	£356.5	£198.8	0.0218

* includes potential revenue from LNG importation but excludes storage entry points.

Appendix C. – Key NTS Entry Capacity Charging Changes

The following table outlines the key NTS Charging Methodology changes in relation to the setting of NTS Entry Capacity reserve prices.

No	Date	Key Changes
PC36	Nov 1998	Introduction of daily entry capacity priced at 4 times the administered charge rate for firm and zero for interruptible
PC48	July 1999	Introduction of monthly capacity auctions. MSEC Floor prices determined by the established LRMC methodology with a common 25% discount.
PC49	Aug 1999	DSEC ~ 1.5 x daily rate of cleared price obtained in the relevant monthly auction. (average of the top 50% by volume of accepted bids) or 1.0 x published charges. DISEC ~ 0.1 x daily rate of cleared price obtained in the relevant monthly auction. (average of the top 50% by volume of accepted bids) or published charge.
PC51	Jan 2000	Introduction of within day auctions (WDDSEC) with a floor price multiple of 1.0 times the average of the top 50% by volume of accepted bids in the relevant auction of MSEC.
PC61	May 2000	MSEC floor price calculations take into account the quantities that have been identified for sale in the Network Code and The adjustment for an assumption of equal revenue recovery from NTS entry and exit capacity should be discontinued.
PC62	May 2000	DSEC Floor Prices should follow the same methodology as that applied for MSEC and that a 50% discount should be applied to the adjusted administered charge rate. Daily interruptible (DISEC) reserve price of zero.
PC72	Feb 2002	In light of the issues raised and the detailed Licence drafting published at the time, it was decided not to propose the methodology change introducing WDDSEC zero prices, as outlined in PC72.
PC76	Nov 2002	Reserve prices for NTS TO entry capacity should be based on the UCAs specified in the GT Licence. Prices no longer adjusted for allowed revenue. The relationship between MSEC and DADSEC reserve prices remain as at present, with DSEC reserve price at each entry point equal to two thirds MSEC reserve price WDDSEC reserve prices should be zero
GCM01	Nov 2006	Introduction of the Transportation Model

Appendix D. – Relevant Objectives

Licence Objectives

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.

The relevant charging objectives are as follows;

- 1) (a) 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;
- 1) (bb) Where prices are established by auction, either
  - no reserve price is applied, or
  - that reserve price is set at a level best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and
  - best calculated to promote competition between gas suppliers and between gas shippers;
- 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.

EU Gas Regulations

EC Regulation 1775/2005[2] on conditions for access to the natural gas transmission networks , Article 13; Tariffs for access to networks is summarised as follows; 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.

[2] EC Regulation 1775/2005 is replaced by 715/2009 from 3 March 2011; however the wording of Article 13; 'Tariffs for access to networks', is unchanged.