

**REPORT ON THE APPLICATION OF THE ENTRY
CAPACITY TRANSFER AND TRADE METHODOLOGY
DURING FORMULA YEAR 2007/08**

May 2008

1. INTRODUCTION

National Grid Gas plc (“National Grid”) in its role as holder of the Gas Transportation Licence in respect of the NTS (the “Licence”) has prepared this report to meet the requirements set out in Standard Special Condition C8D paragraphs 11(i) and 12(i) of the Licence, as detailed below

C8D 11(i)

“The licensee shall, by 31 May 2008 and 31 May in each subsequent formula year, provide the Authority with a report on the application and implementation of the entry capacity transfer methodology during the previous formula year setting out the extent to which, in the licensee’s opinion, the entry capacity transfer objectives were achieved during that previous formula year”

C8D 12(i)

“The licensee shall, by 31 May 2008 and 31 May in each subsequent formula year, provide the Authority with a report on the application and implementation of the entry capacity trade methodology during the previous formula year setting out the extent to which, in the licensee’s opinion, the entry capacity trade objectives were achieved during that previous formula year”

The report provides details of the operation of National Grid’s entry capacity transfer and trade (“T&T”) methodologies over the period 1 November 2007 to 31 March 2008. In particular, it sets out the extent to which National Grid believes the entry capacity transfer and entry capacity trade objectives (“T&T objectives”) were achieved for the formula year 2007/08. It also summarises the areas of potential future development.

In addition to this introduction this report consists of three sections:

- **Section 2** summarises the results of the Transfer & Trade System Entry Capacity (“TTSEC”) auctions;
- **Section 3** reviews the extent to which the Licence objectives were achieved during the period; and
- **Section 4** examines problems identified with the T&T methodologies and suggests potential developments that might be expected to improve the ability of National Grid to better meet the intent of the T&T objectives.

The obligation to introduce T&T processes are detailed in Standard Special Condition C8D paragraphs 11 and 12 of the Licence and became effective on 5th September 2007 when the Licence changes to implement the Transmission Price Control Review were enacted. To comply with this obligation, National Grid developed a methodology statement¹ by which National Grid would calculate T&T exchange rates, and worked with the industry to produce the necessary UNC arrangements.

2. TTSEC AUCTION RESULTS

In September 2007 an interim solution was introduced as a result of UNC Modification Proposal 0169² to facilitate T&Ts for the months November 2007 to

¹ The Entry Capacity Transfer and Trade Methodology Statement issue 1.0 dated 31st August 2007.

² Transfer and Trading of Capacity between ASEPs

March 2008. This was a single, two-stage, stand-alone auction which National Grid ran on 27th September and 10th October 2007. Capacity allocations resulting from this auction are provided in the table below.

Capacity Allocated (kWh)						
Location Short Code	Location Name	01-Nov-2007 to 30-Nov-2007	01-Dec-2007 to 31-Dec-2007	01-Jan-2008 to 31-Jan-2008	01-Feb-2008 to 29-Feb-2008	01-Mar-2008 to 31-Mar-2008
BR	Barrow	2,000,000	2,000,000	2,000,000	2,000,000	-
EA	Easington	85,386,471	85,829,308	85,829,308	85,829,308	85,829,308
HT	Hatfield Moor Storage	-	-	-	-	-
IG	Isle of Grain	42,338,086	-	-	-	-
TE	Teesside	23,816,852	48,316,852	42,616,852	41,216,852	-

In summary:

- Users at four ASEPs obtained additional capacity;
- Capacity was allocated for each of the five months for which it was available;
- Allocated capacity at Easington and Teesside was greater than could have been obtained in the absence of the TTSEC auction; aggregate capacity allocations at these ASEPs exceeded obligated levels.

3. ACHIEVEMENT OF OBJECTIVES

The Licence obligations with respect to T&T required National Grid to prepare T&T methodologies, and to submit a statement of these methodologies to the Authority for approval. This submission was required by the date on which the Authority issued a decision giving effect to those Licence conditions (i.e. by 5th September 2007).

In addition, National Grid was obliged to use reasonable endeavours to have an approved methodology statement in force within 3 days of the above date.

National Grid met these obligations as detailed in the table below.

Obligation	Licence Deadline	Date Achieved
Prepare Methodology	5 th September 2007	30 th July 2007 (consultation start date)
Submit Methodology Statement to Authority	5 th September 2007	31 st August 2007
Approved Methodology Statement	8 th September 2007	6 th September 2007

The Licence requires that the T&T methodology is developed to facilitate the achievement of the T&T objectives. These objectives are detailed in Standard Special Condition C8D paragraphs 11(d) and 12(d) of the Licence.

The relevant objectives are:

- ensuring that entry capacity transfer/trade is effected in a manner which makes effective use of the pipeline system;
- ensuring that entry capacity transfer/trade is effected in a manner which is compatible with the physical capability of the pipeline system;
- avoiding material increases in costs (including entry capacity constraint management costs in respect of obligated entry capacity previously allocated

- by National Grid) that are reasonably expected to be incurred by National Grid as a result of facilitating entry capacity transfer/trade; and
- (iv) in so far as is consistent with (i), (ii) and (iii), facilitate effective competition between relevant shippers and between relevant suppliers.

As can be seen from section 2 the T&T methodology was successful in enabling additional capacity allocations to be made available at certain entry points. Specifically, without the interim T&T process it would not have been possible to increase the obligated capacity levels at Easington and Teesside. The interim T&T process facilitated the movement of capacity at Barrow although the capacity could have been obtained via existing secondary trade processes. In the case of Isle of Grain which acquired additional capacity through the TTSEC auction, such allocations could have been obtained without the T&T processes; i.e. in the monthly or daily auctions.

National Grid believes that it has, through the T&T process, of which the methodology is an integral part:

- (i) made effective use of the NTS. The processes have facilitated release of additional capacity at Easington and Teesside where it would otherwise not have been available. In addition, through the surrender of capacity at Barrow, additional capacity was obtained by Shippers that had need for that capacity. However, National Grid believes that more effective use of the NTS was possible (see section 4).
- (ii) ensured that successful T&Ts were compatible with the physical capability of the NTS. Application of the approved methodology placed limits on potential T&Ts thus ensuring that physical capability was not exceeded.
- (iii) avoided material increases in costs. Application of the approved methodology identified system capability limits such that, in the absence of low probability circumstances, the risk of capacity buy-back actions being required was not increased (nor reduced).
- (iv) increased competition between Shipper and Suppliers. By undertaking T&Ts through an auction process all Users had equal access to available capacity and this was allocated to those who valued it most (as indicated by bid prices).

4. ADDITIONAL OBSERVATIONS ON THE APPLICATION OF THE T&T METHODOLOGY

Interim Solution

National Grid believes that the main intention of the T&T obligations is to maximise the release of capacity at ASEPs where there would otherwise be insufficient capacity to meet the needs of Shippers, and that this should be achieved through the movement of the minimum practicable quantity of unwanted capacity from other ASEPs.

Although the interim T&T processes were successful in enabling capacity obligations to be moved between entry points and National Grid met its Licence obligations, significant problems were identified. National Grid believes that T&Ts could have been achieved more efficiently, thereby making better use of the physical capability

of the NTS. National Grid considers it beneficial to document its concerns and suggested improvements.

The key problematic areas with the interim methodology were:

1. Exchange rates provided in advance.

In response to customer requests to provide some certainty of outcomes National Grid provided exchange rates in advance of the TTSEC auction. As there is no certainty prior to the auction as to where successful bids will be there can be no certainty as to the interaction between successive T&Ts. Hence limits were applied, determined, in accordance with the methodology, from network analysis, within which the published exchange rates could be honoured under credible scenarios. This problem was compounded by having a single auction for the whole winter period. This meant that exchange rates had to be determined up to six months in advance which, in our view, resulted in more cautious, but no less valid, scenarios than would take place for a closer timeframe.

2. Assumed 1:1 exchange rate within zone.

In response to customer requests it was decided that the most favourable exchange rate of 1:1 should be offered where possible. To enable this “zones” were identified where a number of entry points that use common sections of the NTS could be assumed to have a high degree of interchangeability. However, even within these zones 1:1 exchange rates could only be accommodated to a limited extent without breaching the T&T objectives. Hence a maximum aggregate capacity of all entry points within a zone (the Zonal Allocation Maximum) was needed, below which any 1:1 exchanges could be accommodated but above which no T&Ts would take place. In the case of the Easington zone, existing aggregate capacity allocations at ASEPs within the zone prior to the TTSEC auction exceeded the zonal limit; this immediately prevented any within zone transfers.

3. Movement of unsterilised capacity.

Some of the capacity that was moved (or was purchased in the AMSEC preceding the TTSEC with the intention to trade it to another ASEP) was not actually sterilised as there were Shippers at the original ASEP that signalled that they still wanted the capacity³.

The features referred to in paragraphs 1 and 2 above were designed to strike a balance between the T&T objectives, i.e. to facilitate T&T whilst ensuring that the physical capability of the system was not exceeded and that accepted T&Ts did not, under credible scenarios, lead to a material increase in costs. However, based on the results of the interim solution, it became clear to National Grid that a different approach, particularly in relation to the provision of exchange rates, could lead to a more economic and efficient re-allocation of capacity.

Potential Improvements

In consideration of the operation of the interim solution National Grid identified the need for improvements to the T&T processes for the enduring arrangements. Addressing the issues identified above that restricted T&Ts led National Grid to

³ Ofgem’s Final Proposals document (Transmission Price Control Review: Final Proposals paragraph 10.8; December 2006; Ofgem ref 206/06) clearly states that the “purpose of the new obligation is to guard against the risk that capacity is sterilised”. However, this was not explicitly translated into the T&T objectives.

conclude that specific features would improve on the capacity allocations made in the interim process.

Key improvements for the enduring solution identified by National Grid are;

- T&Ts to be carried out on an ASEP to ASEP basis i.e. the concept of zones is not used;
- Bids at each ASEP should be grouped together to improve exchange rates;
- Calculations of exchange rates after the specific details of the relevant auction bids are known;
- Surrendered capacity would be allocated at the surrender ASEP first thus ensuring that T&T only uses sterilised capacity;
- T&Ts to be undertaken on a monthly basis, one month in advance, rather than a single auction to cover the entire winter.

Some of the benefits of these features would be:

- Reduced complexity; the methodology underpinning the determination of exchange rates can be much simpler, with fewer assumptions. This would also result in greater repeatability and more transparency.
- Better exchange rates are more likely to be obtained compared to providing fixed exchange rates ahead of the auction.

Enduring Solution

National Grid has worked with the industry to develop enduring arrangements. In developing these arrangements, all of the issues identified above that restricted T&Ts were addressed. The enduring solution⁴ has been developed to best overcome the problems of the interim solution whilst meeting the requirements of all industry players. Hence it is likely to allow greater re-allocation of capacity whilst satisfying the T&T objectives.

5. Summary

- National Grid believes that it has fully complied with the over-riding Entry Capacity Transfer and Entry Capacity Trade obligations through the development of the T&T methodology statement issue 1.0 and implementation of UNC modification proposal 0169.
- National Grid believes that the interim T&T solution applied for formula year 2007/08 successfully met the T&T objectives.
- The interim arrangements successfully provided additional capacity above obligated levels at Easington and Teesside.
- National Grid believes that it could better meet the intent of the T&T objectives. A number of improvements have been identified to improve the efficient and economic re-allocation of capacity.
- These improvements were discussed at a number of industry meetings and, based on a broad industry consensus, have been embedded into the enduring solution.

⁴ As detailed in UNC modification proposals 187A "Alterations to the RMSEC Auction to Accommodate Transfer and Trade of Capacity between ASEPs" and the T&T Methodology Statement issue 2.0 dated 22nd April 2008.