

**REPORT ON THE APPLICATION OF THE CAPACITY  
METHODOLOGIES DURING FORMULA YEAR  
2012/13**

**MAY 2013**

# CONTENTS

<b>1. INTRODUCTION .....</b>	<b>3</b>
<b>2. TRANSFER AND TRADE .....</b>	<b>5</b>
<b>2.1. RESULTS .....</b>	<b>5</b>
<b>2.2. ACHIEVEMENT OF OBJECTIVES .....</b>	<b>6</b>
<b>3. ENTRY CAPACITY SUBSTITUTION.....</b>	<b>7</b>
<b>3.1. RESULTS .....</b>	<b>7</b>
<b>3.2. ACHIEVEMENT OF OBJECTIVES .....</b>	<b>7</b>
<b>4. EXIT CAPACITY SUBSTITUTION.....</b>	<b>8</b>
<b>4.1. RESULTS .....</b>	<b>8</b>
<b>4.2. ACHIEVEMENT OF OBJECTIVES .....</b>	<b>8</b>
<b>5. EXIT CAPACITY REVISION .....</b>	<b>9</b>
<b>6. SUMMARY .....</b>	<b>9</b>

## 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 Special Condition 9A.10, of the Licence.

The Licence obligation, detailed in Special Condition 9A.2, requires National Grid to use reasonable endeavours to:

- a. substitute Entry Capacity and Exit Capacity in accordance with the relevant Capacity Methodology Statements
- b. revise Exit Capacity in accordance with the relevant Capacity Methodology Statement; and
- c. meet any requests from a Relevant Shipper to transfer and/or trade Entry Capacity in accordance with the relevant Capacity Methodology Statements

Special Condition 9A.3 (a) requires National Grid to have in place capacity methodologies (“the methodologies”) that facilitate the achievement of the capacity objectives.

The capacity methodologies are:

- Entry Capacity Substitution
- Exit Capacity Substitution
- Exit Capacity Revision
- Entry Capacity Transfer
- Entry Capacity Trade

Special Condition 9A.3(c) requires these methodologies to be set out in the “Capacity Methodology Statements” and that these must be approved by the Authority. The Capacity Methodology Statements are

- Entry Capacity Substitution
- Exit Capacity Substitution and Revision<sup>1</sup>
- Entry Capacity Transfer and Trade<sup>2</sup>

Special Condition 9A.5 requires that the methodologies are developed to facilitate the achievement of the following objectives (the “capacity objectives”)

(a) ensuring that each of Entry Capacity Substitution and Exit Capacity Substitution, Entry Capacity Transfer, Entry Capacity Trade and Exit Capacity Revision are effected in a manner consistent with the Licensee’s duties under the Act and, in particular, the duty to develop and maintain an efficient and economical pipeline system and its obligations under [the Licence];

(b) in so far as is consistent with (a) above, ensuring that:

- (i) Entry Capacity Substitution is effected in a manner which seeks to minimise the reasonably expected costs associated with Funded Incremental Obligated Entry Capacity, taking into account the Entry Capacity that shippers have indicated that they will require in the future through making a financial commitment to the Licensee; and

---

<sup>1</sup> Due to the high degree of similarity between the exit capacity substitution and revision methodologies National Grid has prepared this single document to satisfy the Licence requirements outlined above.

<sup>2</sup> Due to the high degree of similarity between the entry capacity trade and entry capacity transfer methodologies National Grid has prepared this single document to satisfy the Licence requirements outlined above.

(ii) Exit Capacity Substitution is effected in a manner which seeks to minimise the reasonably expected costs associated with Funded Incremental Obligated Exit Capacity, taking into account the Exit Capacity that shippers and DN Operators have indicated that they will require in the future through making a financial commitment to the Licensee;

(c) in so far as is consistent with (a) above, ensuring that Entry Capacity Substitution, Exit Capacity Substitution, Entry Capacity Transfer, Entry Capacity Trade and Exit Capacity Revision is effected in a manner which is compatible with the physical capability of the pipeline system to which the Licence relates;

(d) in so far as is consistent with (a) above, avoiding material increases in costs including:

(i) Entry Capacity and Exit Capacity Constraint Management costs in respect of Obligated Entry Capacity and Obligated Exit Capacity previously allocated by the Licensee to Relevant Shippers; and

(ii) Exit Capacity Constraint Management costs in respect of Obligated Exit Capacity previously allocated by the Licensee to DN Operators,

that are reasonably expected to be incurred by the Licensee as a result of Entry Capacity Substitution, Exit Capacity Substitution, Entry Capacity Transfer, Entry Capacity Trade and Exit Capacity Revision; and

(e) in so far as is consistent with (a), (and where relevant) (b), (c) and (d) above, facilitating effective competition between:

(i) Relevant Shippers, and to the extent relevant to Exit Capacity, DN Operators; and

(ii) Relevant Suppliers

National Grid has prepared this report to meet the obligation set out in Licence Special Condition 9A.10 that:

“The Licensee must, by 31 May in each Formula Year, provide the Authority with a report on the application and implementation of each methodology relevant to Entry Capacity Transfer, Entry Capacity Trade, Entry Capacity Substitution and Exit Capacity Substitution and Exit Capacity Revision during the previous Formula Year setting out the extent to which, in the Licensee’s opinion, the capacity objectives were achieved during that previous Formula Year.”

The following sections summarise the effects, in terms of capacity release at individual NTS entry and exit points, of applying each capacity methodology for the formula year 2012/13. National Grid’s opinion of the extent to which each capacity methodology achieves the capacity objectives is provided.

## 2. Transfer and Trade

### 2.1. Results

Transfers and Trades resulting from the Rolling Monthly Transfer and Trade System Entry Capacity (RMTNTSEC) auctions for the months April 2012 to March 2013 are provided in the table below.

The first stage of the Entry Capacity Transfer and Trade methodology requires any unsold or surrendered capacity to be used to satisfy bids for capacity from Users at the same ASEP. All unsold and surrendered capacity not allocated in Stage 1 will be made available in Stage 2. Sold out ASEPs with unsatisfied capacity bids from Stage 1 will be considered as recipient ASEPs for Transferring or Trading available capacity from different, donor ASEPs.

Results April 2012 – March 2013					
			Stage 1	Stage 2	
Month	Final Recipient	Initial Donor	Surrendered Quantity Allocated kWh	Transfer	Trade
September	St Fergus	St Fergus	3,000,000	0	0
	Teesside	Teesside	3,000,000	0	0
October	Bacton	Bacton	1,412,603	0	0
November	Bacton	Bacton	29,962,603	0	0
December	Bacton	Bacton	57,152,603	0	0
January	Bacton	Bacton	57,252,603	0	0
	St Fergus	St Fergus	3,000,000	0	0
February	Bacton	Bacton	57,252,603	0	0
March	Bacton	Bacton	30,102,603	0	0
	St Fergus	St Fergus	3,000,000	0	0
Total			245,135,618	0	0

The table above shows that:

- for the period April 2012 to March 2013 all capacity requests, at all ASEPS, were satisfied in stage 1, i.e. by using capacity at the same ASEP
- at ASEPs where surrendered capacity was allocated more capacity remained available at these ASEPs for allocation through the Daily Auctions than would have been the case without the surrender process
- because all capacity requests were satisfied in stage 1 no capacity transfer or trades, i.e. between different ASEPs, were required

The Entry Capacity Transfer and Trade (T&T) methodology has therefore been successful in enabling additional capacity to be made available at all entry points where firm capacity was requested as part of the RMTNTSEC auction.

Please note:

- **Surrendered capacity** is capacity that Shippers with capacity allocations greater than their requirements make available for purchase by other Shippers, at the same or different ASEPs. If surrendered capacity is not allocated to a new Shipper then it remains with the original Shipper at the original ASEP.
- In **Stage 1** unsold capacity plus surrendered capacity is made available for allocation in the RMTNTSEC auction at the same specific ASEP. Any allocations under stage 1 either from unsold or surrendered capacity is neither a trade nor transfer as defined by the Licence.
- In **Stage 2** all ASEPs with unsold and surrendered capacity not allocated in stage 1 will be considered as donor ASEPs for Transferring or Trading that capacity to different ASEPs
- Any unsold capacity allocated in stage 1, i.e. at the same ASEP, has been omitted from the table.

## 2.2. Achievement of Objectives

As can be seen from the table above, the T&T methodology was successful in enabling additional capacity to be made available to Shippers. Where surrendered capacity was allocated; more capacity remained for the Daily Auctions. The T&T process stimulated secondary trading at Bacton, St Fergus and Teesside and in total 245,135,618 kWh of capacity was surrendered and allocated leaving this quantity of additional capacity remaining for the Daily Auction at these ASEPs.

Though all bids were satisfied during stage 1 allocations, the lack of stage 2 activity should not, in National Grid's view, be interpreted as a negative reflection upon the effectiveness of the methodology. It is an indication that in these months there was sufficient capacity available at each ASEP for all bids to be satisfied using the unsold and surrendered capacity at that ASEP.

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

- has made effective use of the NTS. Through the surrender and allocation of capacity at Bacton, St Fergus and Teesside, better use was made of existing capacity.
- would have avoided material increases in costs, had stage 2 allocations been required. The application of the approved methodology would have identified system capability limits such that, in the absence of low probability circumstances, the risk of capacity buy-back actions being required would not have been significantly increased (nor reduced).
- has increased competition between Shipper and Suppliers. By undertaking Transfers and Trades 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)

### 3. Entry Capacity Substitution

#### 3.1. Results

The Entry Capacity Substitution Methodology has been available, if needed, to enable unsold Non-Incremental Obligated Entry Capacity at one or more ASEP(s), to meet the requirement for capacity in excess of the Obligated Entry Capacity elsewhere. This is in preference to releasing Funded Incremental Entry Capacity which would require investment in new infrastructure.

Entry Capacity Substitution resulting from QSEC auctions for March 2012 is provided in the table below<sup>3</sup>.

Results for March 2012 QSEC					
ASEP where release of incremental entry capacity was triggered.	Quantity	Date from	Donor	Quantity Substituted	Comment
None	n/a	n/a	n/a	n/a	

As there were no bids for capacity that triggered the release of incremental capacity there was no requirement, nor opportunity, to consider entry capacity substitution.

Entry Capacity Substitution resulting from QSEC auctions for March 2013 is provided in the table below<sup>4</sup>:

Results for March 2013 QSEC					
ASEP where release of incremental entry capacity was triggered.	Quantity	Date from	Donor	Quantity Substituted	Comment
None	n/a	n/a	n/a	n/a	

As there were no bids that triggered the release of incremental capacity there will be no requirement, nor opportunity to consider entry capacity substitution. Had such bids been received substitution would have been considered and indicative data relating to quantities and ASEPs populated in the table. The timing of this report would prevent definitive data being provided.

#### 3.2. Achievement of Objectives

As can be seen from the tables above, the Entry Capacity Substitution methodology was not tested. However National Grid believes that it provides a robust methodology that, whilst meeting the capacity objectives, would allow for the release of capacity at an ASEP in excess of the Obligated Entry Capacity without the need to release Funded Incremental Obligated Entry Capacity.

<sup>3</sup> The results for March 2012 QSEC auction are included within this report because substitution analysis was not completed until formula year 2012/2013, as there are 60 days to allocate post the March 12 bid window.

<sup>4</sup> The results for March 2013 QSEC auction are included within this report however quantity substituted is not known until the substitution analysis is completed in formula year 2013/14, as there are 60 days to allocate post the March 13 bid window.

## 4. Exit Capacity Substitution

### 4.1. Results

The Exit Capacity Substitution methodology enables additional exit capacity to be made available which otherwise would have been made available only with additional funding of investment to satisfy the incremental demand through the release of Funded Incremental Obligated Exit Capacity.

Exit Capacity Substitution, resulting from Enduring Annual NTS Exit (flat) Capacity applications in the July 2012 Application window, is provided in the table below.

Results						
NTS Exit Point where release of incremental exit capacity was triggered.	Quantity kWh	Capacity release date.	Donor Exit Point	Donor Quantity Substituted kWh	Exchange Rate	Remaining quantity requiring funding.
Damhead Creek PS	54,396,184	01-Oct-17	Tatsfield OT	46,486,979	0.8546	Zero

The table shows that:

- Enduring Annual NTS Exit (Flat) Capacity applications in July 2012, triggered the release of incremental capacity at Damhead Creek Power Station from 1 October 2017
- Exit Capacity Substitution was applied with sufficient unsold capacity being available, at an exchange rate of 0.8546 from Tatsfield OT, to meet the incremental demand.
- Exit Capacity Substitution has resulted in an estimated saving of £157.4m (2009/10 prices) through non-application of the South East revenue driver plus an on-going saving from year six through application of the rate of return on avoided investment.

### 4.2. Achievement of Objectives

As can be seen from the table above, the Exit Capacity Substitution methodology has been successful in enabling unsold exit capacity at Tatsfield OT to be used to meet the requirement for incremental exit capacity at Damhead Creek Power Station. Therefore additional capacity has been made available without the requirement for additional funding through the revenue driver mechanism. Consistent with the capacity objectives, application of the methodology has resulted in a saving of £157.4m.



## 5. Exit Capacity Revision

Since the introduction of the Exit Capacity Revision methodology there has been no incremental entry capacity released and hence no increased flow at any ASEPs has been demonstrated. As a result, within the formula year April 2012 to March 2013, no notional NTS exit points have been established and exit capacity revision has not occurred.

## 6. Summary

National Grid believes that it has fully complied with

- the Entry Capacity Transfer and Entry Capacity Trade obligations through the application of the prevailing Entry Capacity Transfer and Trade Methodology Statement .
- the Entry Capacity Substitution obligations through the application of the prevailing Entry Capacity Substitution Methodology Statement , and
- the Exit Capacity Substitution and Exit Capacity Revision obligations through the application of the prevailing Exit Capacity Substitution and Revision Methodology Statement .

National Grid believes that

- the Transfer and Trade solution successfully met the capacity objectives in formula year 2012/13.
- despite there being no opportunity to apply the Entry Capacity Substitution, methodology for formula year 2012/13, it has been developed such that it successfully met the capacity objectives in formula year 2012/13.
- Exit Capacity Substitution and Exit Capacity Revision have successfully met the capacity objectives for formula year 2012/2013. Exit Capacity was substituted from Tatsfield offtake to Damhead Creek power station saving an estimated £157.4 million plus an on-going saving from year six through application of the rate of return on avoided investment.