Report on the application of the Capacity Methodologies during Formula Year 2018/19

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nationalgrid

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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 as set out in Special Condition 9A.10 of the Licence, that:

"The Licensee must, by 31st 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."

National Grid is further required to use "reasonable endeavours" to ensure that the Methodologies will facilitate the "Capacity Objectives" as set out within Special Condition 9A.5 and for information contained within Appendix 1 (Additional applicable Licence conditions are also contained within Appendix 1).

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 2018/19. 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 2018 to March 2019 are provided in the table below.

The first stage of the Entry Capacity Transfer and Trade methodology, requires that where possible unsold or surrendered capacity at an ASEP is 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.

Month	Initial Recipient	Final Donor	Capacity Offered for Surrender	Surrendered Quantity Allocated	Transfer	Trade	Unsold Quantity Remaining
			kWh/d	kWh/d			kWh/d
Apr-18	Teesside	-	24,200,000	-	-	-	359,439,404
May-18	Teesside	-	24,200,000	-	-	-	359,439,404
Jun-18	Teesside	-	24,200,000	-	-	-	359,439,404
Jul-18	Teesside	-	24,200,000	-	-	-	360,200,004
Aug-18	Teesside	-	24,200,000	-	-	-	360,200,004
Sep-18	Teesside	-	24,200,000	-	-	-	336,000,004
Oct-18	-	-	-	-	-	-	-
Nov-18	-	-	-	-	-	-	-
Dec-18	Bacton UKCS	-	50,000,000		-	-	151,912,180
Jan-19	Bacton UKCS	-	50,000,000	-	-	-	-
Jan-19	Easington	-	16,000,000		-	-	106,200,000
Feb-19	Bacton UKCS	-	50,000,000	-	-	-	-
Mar-19	Bacton UKCS	-	-		-	-	339,976,713
Total			311,200,000	-	-	-	2,392,830,404
Month	Recipient	Donor					Unsold Quantity Remaining – Donor
							kWh/d
Jan - 19	Bacton UKCS	Isle of Grain			7,033,704		28,346,296
Mar -19	Bacton UKCS	Isle of Grain			7,033,704		28,346,296
Total					14,067,408		

The table above shows that:

- For the period April 2018 to March 2019 there were no surrender quantities allocated at any ASEPS within Stage 1. Capacity was offered for Surrender at Teesside, Bacton UKCS and Easington, however none of the bids were successful
- For the January 2019 period, capacity was offered for Surrender at Bacton UKCS. There was a bid submitted at a price higher than the actual reserve price and this was rejected. Consequently, Stage 2 was required for the first time in this financial year. Analysis was carried out by the NTS Access

and Planning team, to assess if there was any additional risk to the network if capacity was transferred to Bacton UKCS from Isle of Grain. After completing their investigation, they confirmed there was no risk to the network in this instance

Similarly, for March 2019 Stage 2 was required and capacity was transferred from Isle of Grain to Bacton UKCS. The NTS Access and Planning team carried out an assessment and confirmed that there was no additional risk to the network.

The Entry Capacity Transfer and Trade 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 Transfer and Trade methodology was successful in enabling additional capacity to be made available to Shippers. A total of 14,067,408 kwh/d was Transferred from the donor site Isle of Grain to Bacton UKCS for the months of January and March. A total 311,200,000 kWh/d of capacity was offered for Surrender, none of which was allocated.

All bids up until January 2019 were satisfied within Stage 1 allocations. Stage 2 was required in January and March 2019 for different reasons which have been outlined in Section 2.1. Despite these two instances, National Grid is confident that there is enough capacity available at each of the ASEPs and where there was a request for additional capacity to be made available the Network has been able to cope.

National Grid believes that through the Entry Capacity Transfer and Trade process, of which the methodology is an integral part, it:

- Has made effective use of the NTS. Through the transfer of capacity at Isle of Grain to Bacton UKCS, better use was made of existing capacity;
- Avoided any material increases in costs, despite entering into Stage 2. The NTS Access and Planning team conducted analysis and confirmed there is no increased risk of capacity buy backs being required due to capacity being utilised from Isle of Grain. 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).

3 Entry Capacity Substitution

3.1 Results

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

Entry Capacity Substitution resulting from the QSEC auctions in March 2018 is provided in the table below.

Results for March 2018 QSEC							
ASEP where release of incremental entry capacity was triggered.	Quantity kWh/d	Date from	Donor	Quantity Substituted kWh/d	Comment		
Cheshire	13,567,500	01/10/2019	Partington	13,567,500			

No PARCA applications were received during the year 2018 – 2019 that resulted in Entry Substitution. However, a PARCA application was received for Milford Haven which triggered an Adhoc QSEC auction. There was no requirement for substitution but funded incremental capacity was released.

Results for Adhoc 2018 QSEC							
ASEP where release of incremental entry capacity was triggered.	Quantity kWh/d	Date from	Donor	Quantity Substituted kWh/d	Comment		
N/A	N/A	N/A	N/A	N/A	N/A		

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. As this was an Adhoc QSEC auction there is no mechanism to substitute the capacity, so Incremental Capacity could only be released as Non Obligation Capacity.

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 2018 Application window, is provided in the table below.

	Results								
Recipient NTS Exit Point	Quantity kWh/d	Donor NTS Exit Points	Capacity Donated kWh/d	Capacity Received kWh/d	Exchange Rate (Recipient : Donor)	Remaining quantity requiring funding kWh/d	Effective from		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

The results table shows that:

• That there were no Enduring Annual NTS Exit (Flat) Capacity applications in July 2018, received.

4.2 Achievement of Objectives

As is evident in the table above, National Grid have not received any Exit Capacity Substitution requests and consequently the methodology has not been tested. However, National Grid believes that the methodology is robust, whilst meeting the capacity objectives.

4.3 PARCA

	PARCA Applications							
Recipient NTS Point	Quantity kWh/d	Donor NTS Points	Capacity Donated kWh/h	Capacity Allocated kWh/d	Exchange Rate (Recipient : Donor)	Effective from		
Ipsden	7,862,364	N/A	N/A	N/A	N/A	01/02/2019		
lpsden 2	9,787,563	N/A	N/A	N/A	N/A	01/02/2019		
Mappowder	32,916,053	N/A	N/A	N/A	N/A	01/02/2019		

The table shows that:

 Planning and Advanced Reservation of Capacity Agreement (PARCA) applications received, requesting 50,565,980 kWh/d In these instances, capacity was not substituted and there were no donor sites due to the sites utilising unsold capacity.

5 Exit Capacity Revision

Since the introduction of the Exit Capacity Substitution and Revision Methodology, there has been no Incremental Obligated Entry Capacity released and hence no increased flow at any Entry Points has been demonstrated. As a result, within the formula year April 2018 to March 2019, no notional NTS Exit points have been established and Exit Capacity Revision has not occurred.

6 Interconnector Points Rolling Monthly Auctions

6.1 Results

Transfers and Trades resulting from the Interconnector Points Rolling Monthly System Entry Capacity (IPRMSEC) auctions for the months April 2018 to March 2019 are provided in the table below.

Results April 2018 – March 2019								
Stage 1								
Month	Location	Capacity Obligation kWh/d	Surrendered Quantity Allocated kWh/d	Quantity Available for Offer kWh/d				
Apr-18	Bacton Interconnector	1,297,800,000	-	1,297,800,000				
May-18	Bacton Interconnector	1,297,800,000	-	1,297,800,000				
Jun-18	Bacton Interconnector	1,297,800,000	-	1,297,800,000				
Jul-18	Bacton Interconnector	1,297,800,000	-	1,297,800,000				
Aug-18	Bacton Interconnector	1,297,800,000	-	1,297,800,000				
Sep-18	Bacton Interconnector	1,297,800,000	-	1,297,800,000				
Oct-18	Bacton Interconnector	1,297,800,000	-	1,222,383,000				
Nov-18	Bacton Interconnector	1,297,800,000	-	1,222,383,000				
Dec-18	Bacton Interconnector	1,297,800,000	-	1,222,383,000				
Jan-19	Bacton Interconnector	1,297,800,000	-	724,070,689				
Feb-19	Bacton Interconnector	1,297,800,000	-	724,070,689				
Mar-19	Bacton Interconnector	1,297,800,000	-	724,070,689				
Total		15,573,600,000	-	13,456,455,627				

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7 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 2018/19;
- despite there being no opportunity to apply the Entry Capacity Substitution, methodology for formula year 2018/19, it has been developed such that it successfully met the capacity objectives in formula year 2018/19;
- the Exit Capacity Substitution methodology successfully met the capacity objectives in formula year 2018/19.

Appendix 1 – Licence Conditions

Special Condition 9A. 2 - This obligation requires National Grid to use reasonable endeavours to:

- substitute Entry Capacity and Exit Capacity in accordance with the relevant Capacity Methodology Statements
- revise Exit Capacity in accordance with the relevant Capacity Methodology Statement; and
- 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) - This obligation 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) – This obligation requires these methodologies to be set out in the "Capacity Methodology Statements" and that they are approved by the Authority. The Capacity Methodology Statements are:

- Entry Capacity Substitution
- Exit Capacity Substitution and Revision¹
- Entry Capacity Transfer and Trade²

<u>Special Condition 9A.5 –</u> This obligation requires that the methodologies are developed to facilitate the achievement of the "capacity objectives", which are:

(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

(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

¹ 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 ² Due to the high degree of similarity between the Entry Capacity Trade and Entry Capacity Transfer methodologies National

² 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

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

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