

Procurement Guidelines Report

For the Period
01 April 2017 – 31 March 2018

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Executive Summary

National Grid has been given discretion with regard to the procurement of System Management Services, subject to an obligation under its Gas Transporter (GT) Licence to operate the system in an efficient, economic and co-ordinated manner, and taking into account its (System Operator) SO incentives.

National Grid confirms that System Management Services during the period covered by this report have been procured in accordance with the principles set out in the prevailing Procurement Guidelines, and therefore National Grid considers that such activities satisfy its relevant Licence obligations.

1. Introduction

1.1 Purpose of the document

This document is the Procurement Guidelines Report (“Report”) which National Grid is required to publish in accordance with Special Condition 8a.8 of its GT Licence. This Report provides information in respect of the procurement of System Management Services referred to in the Procurement Guidelines. The Procurement Guidelines set out the kinds of System Management Services which National Grid may be interested in purchasing, together with the mechanisms by which National Grid envisages purchasing such services.

This Report, which has been developed in consultation with the Authority, covers each of the services detailed in Table 1 of the Procurement Guidelines, and identifies contractual and market-related information for each of the services.

Terms used within this report shall have the same meaning given to them in National Grid’s GT Licence and the Uniform Network Code, as the case may be.

Further copies of this Report may be obtained from <https://www.nationalgrid.com/uk/about-grid/how-we-are-regulated/gas-industry-compliance>

Or from:

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1.2 Reporting Period

This Report has been prepared in accordance with Part B of Special Condition 8a.8. This Condition states that the Report should be produced within one month of the start of the formula year.

The report includes details of System Management Services procured in relation to the gas flow period 1 April 2017 to 31 March 2018 inclusive.

This reporting period covers the last month of the Storage Year 2016/2017 (April 2017) and the majority of Storage Year 2017/2018 (May 2017 to March 2018).

2. Procurement of System Management Services

2.1 Definition of System Management Services

Special Condition 8a.8 Part K of National Grid's GT Licence defines the System Management Services as the "services in relation to the balancing of gas inputs to and gas off takes from the NTS and includes balancing trades and balancing trade derivatives and constraint management services".

Table 1 in the Procurement Guidelines Report summarises the above System Management Services as being required for the following applications:

1. Operating Margins Gas
2. Constrained Storage
3. Shrinkage
4. Entry Capacity Management
5. Exit Capacity Management
6. Gas Balancing
7. OCM Collateralisation Costs

2.2 System Management Services Procured

The services National Grid procured in this period are summarised in Table 1.

Table 1 - Services Procured

1. Operating Margins (OM)

The purpose of an OM system management service is to ensure Operational Balancing capability in the event of a supply failure, demand forecast change or plant failure. In addition, a quantity of OM is held in reserve to manage the orderly run-down of the system in an emergency.

Service Component	Component Description and Details
Holdings Contracts (Capacity and Deliverability Arrangements)	National Grid (OM) procured this service at the following facilities: <ul style="list-style-type: none"> ▪ Aldbrough storage facility ▪ Hatfield Moor storage facility ▪ Hill Top Farm storage facility ▪ Hole House Farm storage facility ▪ Holford storage facility ▪ Hornsea storage facility ▪ Humbly Grove storage facility ▪ Stublach storage facility ▪ Rough storage facility ▪ Dragon LNG ▪ Grain LNG Importation terminal ▪ Power Stations ▪ Bacton BBL

Table 1 - Services Procured

1. Operating Margins (OM)

The purpose of an OM system management service is to ensure Operational Balancing capability in the event of a supply failure, demand forecast change or plant failure. In addition, a quantity of OM is held in reserve to manage the orderly run-down of the system in an emergency.

Service Component	Component Description and Details			
Holdings Contracts (Capacity Arrangements)	<i>For the period 1 April 2017 – 31 March 2018, National Grid (OM) procured Operating Margins as follows:</i>			
	Month	Contract Type	Space (kWh)	Average Unit cost (p/kWh/annum)
	Apr-17	Capacity Contracts	440,668,520	0.9742
	May-17 to Mar-18	Capacity Contracts	554,255,068	1.0577

Holdings Contracts (Delivery Arrangements)	<i>For the period 1 April 2017 – 31 March 2018, National Grid (OM) procured Operating Margins as follows:</i>			
	Month	Contract Type	OM Deliverability (kWh/d)	Average Price (p/kWh/d/annum)
	Apr-17	Delivery Contracts	270,636,080	2.3290
	May-17 to Mar-18	Delivery Contracts	350,935,984	1.5093

Table 1 - Services Procured

1. Operating Margins (OM)

The purpose of an OM system management service is to ensure Operational Balancing capability in the event of a supply failure, demand forecast change or plant failure. In addition, a quantity of OM is held in reserve to manage the orderly run-down of the system in an emergency.

Service Component	Component Description and Details															
Gas Procurement	<p>National Grid (OM) utilises this service to address an Operating Margins gas deficit at a given storage facility where National Grid holds Operating Margins Capacity Arrangements. National Grid (OM) either issues a tender to Users to meet its requirements or injects gas that has been withdrawn from storage facilities with an Operating Margins gas surplus. Typically, National Grid invites Users to offer to sell gas either in store or at the NBP although National Grid may contract for the purchase of OM gas (as to all or any part of its requirements).</p> <p><i>For the period 1 April 2017 – 31 March 2018, National Grid (OM) procured this service as follows:</i></p> <table border="1"> <thead> <tr> <th>Month</th> <th>In-store quantity (kWh)</th> <th>NBP quantity (kWh)</th> <th>In-store weighted average price (p/kWh)</th> <th>NBP weighted average price (p/kWh)</th> </tr> </thead> <tbody> <tr> <td>Apr-17</td> <td>0</td> <td>240,614,364</td> <td>N/A</td> <td>1.3099</td> </tr> <tr> <td>Jun-17</td> <td>0</td> <td>60,000,000</td> <td>N/A</td> <td>1.2687</td> </tr> </tbody> </table>	Month	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)	Apr-17	0	240,614,364	N/A	1.3099	Jun-17	0	60,000,000	N/A	1.2687
Month	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)												
Apr-17	0	240,614,364	N/A	1.3099												
Jun-17	0	60,000,000	N/A	1.2687												

Gas Disposal	<p>National Grid (OM) utilises this service to address a gas surplus at a given storage facility where National Grid holds or has held Operating Margins Capacity Arrangements. National Grid (OM) either issues a tender to Users to meet its requirements or withdraws gas to inject into storage facilities with an Operating Margins gas deficit. Typically, National Grid invites Users to bid to buy gas either in store or at the NBP.</p> <p><i>For the period 1 April 2017 – 31 March 2018, National Grid (OM) procured this service as follows:</i></p> <table border="1"> <thead> <tr> <th>Month</th> <th>In-store quantity (kWh)</th> <th>NBP quantity (kWh)</th> <th>In-store weighted average price (p/kWh)</th> <th>NBP weighted average price (p/kWh)</th> </tr> </thead> <tbody> <tr> <td>Apr-17</td> <td>127,000,000</td> <td>0</td> <td>1.3454</td> <td>N/A</td> </tr> <tr> <td>Jun-17</td> <td>0</td> <td>60,000,000</td> <td>N/A</td> <td>1.0844</td> </tr> </tbody> </table>				Month	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)	Apr-17	127,000,000	0	1.3454	N/A	Jun-17	0	60,000,000	N/A	1.0844
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Apr-17	127,000,000	0	1.3454	N/A															
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Table 1 - Services Procured

1. Operating Margins (OM)	
<p>The purpose of an OM system management service is to ensure Operational Balancing capability in the event of a supply failure, demand forecast change or plant failure. In addition, a quantity of OM is held in reserve to manage the orderly run-down of the system in an emergency.</p>	
Service Component	Component Description and Details
OM Transfer between Storage Facilities	<p>National Grid (OM) utilises this service to address a gas-in-store surplus or deficit by transferring OM gas between Storage Facilities.</p> <p>For the period 1 April 2017 – 31 March 2018, National Grid transferred 47,205,582 kWh of OM Gas between Storage Facilities.</p>
OM Utilisation	<p>National Grid (OM) utilises Operating Margins services to ensure Operational Balancing capability in the event of a supply failure, demand forecast change or plant failure.</p> <p>National Grid utilised Gas Operating Margins services on the 1st March 2018.</p>

Table 1 - Services Procured**2. Constrained Storage**

The purpose of a Constrained Storage service is to economically meet 1 in 20 capacity obligations at the network extremities.

For the period 1 April 2017 – 31 March 2018, no constrained services were procured.

Table 1 - Services Procured

3. Shrinkage

The NTS Shrinkage Provider manages the risk exposure associated with the shrinkage account. Shrinkage covers gas for own use (running of compressors, vented gas, gas used for preheating) and to cover any gas losses (unidentified theft, meter errors, leakage) and CV shrinkage associated with variations in calorific value of gas. The account is subject to normal cash-out arrangements if the daily gas quantities delivered to the system do not match the Daily Shrinkage Quantities.

National Grid manages this service by trading gas at the beach or at the NBP, following the approval of Network Code Modification Proposals 0579 (Feb 2003) and 0599 (April 2004).

Service Component	Component Description and Details																																																																																																	
NBP Trades	<i>For 1 April 2017 – 31 March 2018, National Grid procured NTS shrinkage via NBP trades as follows:</i>																																																																																																	
	<table border="1"> <thead> <tr> <th>Month</th> <th>Total Quantity Purchased (kWh)</th> <th>Purchase Cost (£)</th> <th>Weighted Average Purchase Price (p/kWh)</th> <th>Total Quantity Sold (kWh)</th> <th>Sell Revenue (£)</th> <th>Weighted Average Sell Price (p/kWh)</th> </tr> </thead> <tbody> <tr><td>Apr-17</td><td>358,689,597</td><td>5,033,454</td><td>1.4033</td><td>5,245,971</td><td>73,142</td><td>1.3942</td></tr> <tr><td>May-17</td><td>235,365,320</td><td>3,378,505</td><td>1.4354</td><td>69,106,142</td><td>897,763</td><td>1.2991</td></tr> <tr><td>Jun-17</td><td>200,050,265</td><td>2,895,592</td><td>1.4474</td><td>78,316,924</td><td>928,131</td><td>1.1851</td></tr> <tr><td>Jul-17</td><td>342,687,920</td><td>4,606,118</td><td>1.3441</td><td>134,079,983</td><td>1,678,595</td><td>1.2519</td></tr> <tr><td>Aug-17</td><td>241,490,504</td><td>3,305,495</td><td>1.3688</td><td>293,071</td><td>3,850</td><td>1.3137</td></tr> <tr><td>Sep-17</td><td>287,854,336</td><td>4,034,930</td><td>1.4017</td><td>1,318,820</td><td>20,723</td><td>1.5713</td></tr> <tr><td>Oct-17</td><td>313,058,442</td><td>4,855,081</td><td>1.5509</td><td>3,077,246</td><td>49,100</td><td>1.5956</td></tr> <tr><td>Nov-17</td><td>237,387,510</td><td>3,710,850</td><td>1.5632</td><td>56,738,546</td><td>990,550</td><td>1.7458</td></tr> <tr><td>Dec-17</td><td>387,176,098</td><td>6,594,118</td><td>1.7031</td><td>586,142</td><td>13,900</td><td>2.3714</td></tr> <tr><td>Jan-18</td><td>159,518,545</td><td>2,809,302</td><td>1.7611</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Feb-18</td><td>193,866,467</td><td>3,579,421</td><td>1.8463</td><td>1,699,812</td><td>32,745</td><td>1.9264</td></tr> <tr><td>Mar-18</td><td>506,162,924</td><td>9,485,345</td><td>1.8740</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table>	Month	Total Quantity Purchased (kWh)	Purchase Cost (£)	Weighted Average Purchase Price (p/kWh)	Total Quantity Sold (kWh)	Sell Revenue (£)	Weighted Average Sell Price (p/kWh)	Apr-17	358,689,597	5,033,454	1.4033	5,245,971	73,142	1.3942	May-17	235,365,320	3,378,505	1.4354	69,106,142	897,763	1.2991	Jun-17	200,050,265	2,895,592	1.4474	78,316,924	928,131	1.1851	Jul-17	342,687,920	4,606,118	1.3441	134,079,983	1,678,595	1.2519	Aug-17	241,490,504	3,305,495	1.3688	293,071	3,850	1.3137	Sep-17	287,854,336	4,034,930	1.4017	1,318,820	20,723	1.5713	Oct-17	313,058,442	4,855,081	1.5509	3,077,246	49,100	1.5956	Nov-17	237,387,510	3,710,850	1.5632	56,738,546	990,550	1.7458	Dec-17	387,176,098	6,594,118	1.7031	586,142	13,900	2.3714	Jan-18	159,518,545	2,809,302	1.7611	0	0	0	Feb-18	193,866,467	3,579,421	1.8463	1,699,812	32,745	1.9264	Mar-18	506,162,924	9,485,345	1.8740	0	0	0						
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Table 1 - Services Procured

3. Shrinkage

The NTS Shrinkage Provider manages the risk exposure associated with the shrinkage account. Shrinkage covers gas for own use (running of compressors, vented gas, gas used for preheating) and to cover any gas losses (unidentified theft, meter errors, leakage) and CV shrinkage associated with variations in calorific value of gas. The account is subject to normal cash-out arrangements if the daily gas quantities delivered to the system do not match the Daily Shrinkage Quantities.

National Grid manages this service by trading gas at the beach or at the NBP, following the approval of Network Code Modification Proposals 0579 (Feb 2003) and 0599 (April 2004).

Service Component	Component Description and Details						
Imbalance Cash-out	<i>From 1 April 2017 – 31 March 2018, National Grid's imbalance cash-out for the NTS shrinkage account was as follows:</i>						
	Month	Total Quantity Purchased (kWh)	Purchase Cost (£)	Weighted Average Purchase Price (p/kWh)	Total Quantity Sold (kWh)	Sell Revenue (£)	Weighted Average Sell Price (p/kWh)
	Apr-17	4,441,969	61,982	1.3954	3,713,123	47,568	1.2811
	May-17	6,085,080	84,875	1.3948	4,893,334	61,807	1.2631
	Jun-17	2,992,493	37,648	1.2581	3,460,817	40,885	1.1814
	Jul-17	5,007,343	64,511	1.2883	6,490,807	79,040	1.2177
	Aug-17	5,555,189	84,907	1.5284	2,567,877	35,164	1.3694
	Sep-17	11,812,722	191,215	1.6187	2,530,690	38,289	1.5130
	Oct-17	7,386,053	114,895	1.5556	2,550,136	38,530	1.5109
	Nov-17	1,479,843	28,763	1.9436	4,212,134	71,777	1.7040
	Dec-17	10,218,934	202,924	1.9858	1,547,633	29,372	1.8979
	Jan-18	3,856,619	67,172	1.7417	1,042,774	16,938	1.6243
	Feb-18	3,219,126	68,472	2.1270	3,429,082	59,484	1.7347
	Mar-18	18,583,522	419,664	2.2583	439,895	12,161	2.7646

Table 1 - Services Procured**4. Entry Capacity Management**

The purpose of an entry capacity management service is to enable National Grid to efficiently manage firm NTS entry capacity rights. Entry capacity holdings may need to be reduced to either efficiently manage capacity risk exposure or to reduce holdings, and thereby manage flows onto the system. National Grid may buyback firm NTS entry capacity from Users via the Gemini entry capacity system or it may enter into Capacity Management Agreements (CMAs). National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component**Component Description and Details****Buybacks on Gemini**

For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:

Month	ASEP	No. of days on which offers accepted	No. of offers accepted	Quantity accepted (kWh)	Weighted average price (p/kWh)
Apr-17	None	0	0	0	0
May-17	None	0	0	0	0
Jun-17	None	0	0	0	0
Jul-17	None	0	0	0	0
Aug-17	None	0	0	0	0
Sep-17	None	0	0	0	0
Oct-17	None	0	0	0	0
Nov-17	None	0	0	0	0
Dec-17	None	0	0	0	0
Jan-18	None	0	0	0	0
Feb-18	None	0	0	0	0
Mar-18	None	0	0	0	0

Table 1 - Services Procured**4. Entry Capacity Management**

The purpose of an entry capacity management service is to enable National Grid to efficiently manage firm NTS entry capacity rights. Entry capacity holdings may need to be reduced to either efficiently manage capacity risk exposure or to reduce holdings, and thereby manage flows onto the system. National Grid may buyback firm NTS entry capacity from Users via the Gemini entry capacity system or it may enter into Capacity Management Agreements (CMAs). National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component	Component Description and Details																																																							
CMAs – Options Agreements	<i>For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:</i>																																																							
	<table border="1"> <thead> <tr> <th>Period</th> <th>ASEP</th> <th>Total Quantity Accepted (kWh)</th> <th>Cost of Option (£)</th> </tr> </thead> <tbody> <tr><td>Apr-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>May-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Jun-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Jul-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Aug-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Sep-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Oct-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Nov-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Dec-17</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Jan-18</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Feb-18</td><td>None</td><td>0</td><td>0</td></tr> <tr><td>Mar-18</td><td>None</td><td>0</td><td>0</td></tr> </tbody> </table>	Period	ASEP	Total Quantity Accepted (kWh)	Cost of Option (£)	Apr-17	None	0	0	May-17	None	0	0	Jun-17	None	0	0	Jul-17	None	0	0	Aug-17	None	0	0	Sep-17	None	0	0	Oct-17	None	0	0	Nov-17	None	0	0	Dec-17	None	0	0	Jan-18	None	0	0	Feb-18	None	0	0	Mar-18	None	0	0			
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Table 1 - Services Procured**4. Entry Capacity Management**

The purpose of an entry capacity management service is to enable National Grid to efficiently manage firm NTS entry capacity rights. Entry capacity holdings may need to be reduced to either efficiently manage capacity risk exposure or to reduce holdings, and thereby manage flows onto the system. National Grid may buyback firm NTS entry capacity from Users via the Gemini entry capacity system or it may enter into Capacity Management Agreements (CMAs). National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component**Component Description and Details****CMAs – Forwards Agreements**

For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:

Month	ASEP	Quantity utilised (kWh)	Total Cost of Forward Buybacks (£)
Apr-17	None	0	0
May-17	None	0	0
Jun-17	None	0	0
Jul-17	None	0	0
Aug-17	None	0	0
Sep-17	None	0	0
Oct-17	None	0	0
Nov-17	None	0	0
Dec-17	None	0	0
Jan-18	None	0	0
Feb-18	None	0	0
Mar-18	None	0	0

Table 1 - Services Procured

4. Entry Capacity Management

The purpose of an entry capacity management service is to enable National Grid to efficiently manage firm NTS entry capacity rights. Entry capacity holdings may need to be reduced to either efficiently manage capacity risk exposure or to reduce holdings, and thereby manage flows onto the system. National Grid may buyback firm NTS entry capacity from Users via the Gemini entry capacity system or it may enter into Capacity Management Agreements (CMAs). National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component	Component Description and Details																																																																				
CMAs – Options Utilisation	<i>For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:</i>																																																																				
	<table border="1"> <thead> <tr> <th>Month</th> <th>ASEP</th> <th>Quantity utilised (kWh)</th> <th>Total Cost of utilisation (exercise) (£)</th> <th>No. of days on which option exercised</th> </tr> </thead> <tbody> <tr><td>Apr-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>May-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Jun-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Jul-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Aug-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Sep-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Oct-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Nov-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Dec-17</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Jan-18</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Feb-18</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Mar-18</td><td>None</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table>	Month	ASEP	Quantity utilised (kWh)	Total Cost of utilisation (exercise) (£)	No. of days on which option exercised	Apr-17	None	0	0	0	May-17	None	0	0	0	Jun-17	None	0	0	0	Jul-17	None	0	0	0	Aug-17	None	0	0	0	Sep-17	None	0	0	0	Oct-17	None	0	0	0	Nov-17	None	0	0	0	Dec-17	None	0	0	0	Jan-18	None	0	0	0	Feb-18	None	0	0	0	Mar-18	None	0	0	0			
Month	ASEP	Quantity utilised (kWh)	Total Cost of utilisation (exercise) (£)	No. of days on which option exercised																																																																	
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Feb-18	None	0	0	0																																																																	
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Table 1 - Services Procured

4. Entry Capacity Management

The purpose of an entry capacity management service is to enable National Grid to efficiently manage firm NTS entry capacity rights. Entry capacity holdings may need to be reduced to either efficiently manage capacity risk exposure or to reduce holdings, and thereby manage flows onto the system. National Grid may buyback firm NTS entry capacity from Users via the Gemini entry capacity system or it may enter into Capacity Management Agreements (CMAs). National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component**Component Description and Details****Flow Management Agreements**

For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:

Month	Total Cost (£)
Apr-17	£50,000.00
May-17	£48,387.10
Jun-17	£48,333.33
Jul-17	£47,580.65
Aug-17	£49,193.55
Sep-17	£50,000.00
Oct-17	£50,000.00
Nov-17	£50,000.00
Dec-17	£35,483.87
Jan-18	0
Feb-18	0
Mar-18	0

Costs shown are for a turn down agreement at an ASEP.

Table 1 - Services Procured

5. Exit Capacity Management

The purpose of an exit capacity management service is to enable the system to accommodate gas flows in accordance with Users' firm NTS exit capacity rights. In the event of desired exit flows exceeding capability, National Grid may procure a range of demand/supply side services in order to achieve the desired changes in gas flows. National Grid may buyback firm NTS exit capacity from Users via the Gemini exit capacity system or it may enter into Capacity Management Agreements (CMAs), to manage NTS exit constraints and/or Network Gas Supply Emergencies. National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component**Component Description and Details****Buybacks on Gemini**

For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:

Month	Exit Point	No. of days on which offers accepted	No. of offers accepted	Quantity accepted (kWh)	Weighted average price (p/kWh)
Apr-17	None	0	0	0	0
May-17	None	0	0	0	0
Jun-17	None	0	0	0	0
Jul-17	None	0	0	0	0
Aug-17	None	0	0	0	0
Sep-17	None	0	0	0	0
Oct-17	None	0	0	0	0
Nov-17	None	0	0	0	0
Dec-17	None	0	0	0	0
Jan-18	None	0	0	0	0
Feb-18	None	0	0	0	0
Mar-18	None	0	0	0	0

Table 1 - Services Procured

5. Exit Capacity Management

The purpose of an exit capacity management service is to enable the system to accommodate gas flows in accordance with Users' firm NTS exit capacity rights. In the event of desired exit flows exceeding capability, National Grid may procure a range of demand/supply side services in order to achieve the desired changes in gas flows. National Grid may buyback firm NTS exit capacity from Users via the Gemini exit capacity system or it may enter into Capacity Management Agreements (CMAs), to manage NTS exit constraints and/or Network Gas Supply Emergencies. National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component**Component Description and Details****CMAs – Options Agreements**

For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:

Period	Exit Point	Total Quantity Accepted (kWh)	Cost of Option (£)
Apr-17	None	0	0
May-17	None	0	0
Jun-17	None	0	0
Jul-17	None	0	0
Aug-17	None	0	0
Sep-17	None	0	0
Oct-17	None	0	0
Nov-17	None	0	0
Dec-17	None	0	0
Jan-18	None	0	0
Feb-18	None	0	0
Mar-18	None	0	0

Table 1 - Services Procured

5. Exit Capacity Management

The purpose of an exit capacity management service is to enable the system to accommodate gas flows in accordance with Users' firm NTS exit capacity rights. In the event of desired exit flows exceeding capability, National Grid may procure a range of demand/supply side services in order to achieve the desired changes in gas flows. National Grid may buyback firm NTS exit capacity from Users via the Gemini exit capacity system or it may enter into Capacity Management Agreements (CMAs), to manage NTS exit constraints and/or Network Gas Supply Emergencies. National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component	Component Description and Details			
CMAs – Forwards Agreements	<i>For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:</i>			
	Month	Exit Point	Quantity utilised (kWh)	Total Cost of Forward Buybacks (£)
	Apr-17	None	0	0
	May-17	None	0	0
	Jun-17	None	0	0
	Jul-17	None	0	0
	Aug-17	None	0	0
	Sep-17	None	0	0
	Oct-17	None	0	0
	Nov-17	None	0	0
	Dec-17	None	0	0
	Jan-18	None	0	0
	Feb-18	None	0	0
	Mar-18	None	0	0

Table 1 - Services Procured**5. Exit Capacity Management**

The purpose of an exit capacity management service is to enable the system to accommodate gas flows in accordance with Users' firm NTS exit capacity rights. In the event of desired exit flows exceeding capability, National Grid may procure a range of demand/supply side services in order to achieve the desired changes in gas flows. National Grid may buyback firm NTS exit capacity from Users via the Gemini exit capacity system or it may enter into Capacity Management Agreements (CMAs), to manage NTS exit constraints and/or Network Gas Supply Emergencies. National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component**Component Description and Details****CMAs – Options Utilisation**

For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:

Month	Exit Point	Quantity utilised (kWh)	Total Cost of utilisation (option+exercise) (£)	No. of days on which option exercised
Apr-17	None	0	0	0
May-17	None	0	0	0
Jun-17	None	0	0	0
Jul-17	None	0	0	0
Aug-17	None	0	0	0
Sep-17	None	0	0	0
Oct-17	None	0	0	0
Nov-17	None	0	0	0
Dec-17	None	0	0	0
Jan-18	None	0	0	0
Feb-18	None	0	0	0
Mar-18	None	0	0	0

Table 1 - Services Procured**5. Exit Capacity Management**

The purpose of an exit capacity management service is to enable the system to accommodate gas flows in accordance with Users' firm NTS exit capacity rights. In the event of desired exit flows exceeding capability, National Grid may procure a range of demand/supply side services in order to achieve the desired changes in gas flows. National Grid may buyback firm NTS exit capacity from Users via the Gemini exit capacity system or it may enter into Capacity Management Agreements (CMAs), to manage NTS exit constraints and/or Network Gas Supply Emergencies. National Grid may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component**Component Description and Details****Flow Management Agreements**

For the period 1 April 2017 – 31 March 2018, National Grid procured these services as follows:

Month	Total Cost (£)
Apr-17	0
May-17	0
Jun-17	0
Jul-17	0
Aug-17	0
Sep-17	0
Oct-17	0
Nov-17	0
Dec-17	0
Jan-18	0
Feb-18	0
Mar-18	0

Table 1 - Services Procured

6. Gas Balancing

The purpose of a gas balancing system management service is to enable National Grid, acting in its role as residual system balancer, to balance the gas inputs to and offtakes from the NTS, within acceptable levels. In order to achieve the desired gas flows, National Grid may carry out 'prompt' or 'forwards' gas trades or enter into forwards/options energy contracts.

Service Component	Component Description and Details
OCM trades	<p>National Grid trades on the ICE Endex On-the-day Commodity Market (OCM) day ahead and/or within day to resolve imbalances. OCM trades are deployed to achieve both national system balance and to meet localised requirements. For national system requirements, National Grid trades in all three OCM markets i.e. physical, title and locational. For localised requirements, National Grid only trades in the locational market.</p> <p><i>During the period 1 April 2017 – 31 March 2018, National Grid carried out the following OCM trades:</i></p>

Table 1 - Services Procured

6. Gas Balancing

The purpose of a gas balancing system management service is to enable National Grid, acting in its role as residual system balancer, to balance the gas inputs to and offtakes from the NTS, within acceptable levels. In order to achieve the desired gas flows, National Grid may carry out 'prompt' or 'forwards' gas trades or enter into forwards/options energy contracts.

Service Component	Component Description and Details							
OCM 'Title' trades to address a National Requirement	National 'NBP Title' Trades							
	Month	No of Days on Which Trades Accepted	Number of Trade Buys	Number of Trade Sells	Quantity Purchased (kWh)	Quantity Sold (kWh)	Purchase Cost (£)	Sell Revenue (£)
	Apr-17	10	22	122	46,686,212	341,838,017	£652,023	£4,448,239
	May-17	4	20	12	48,942,857	35,168,520	£698,665	£445,465
	Jun-17	9	120	0	273,552,475	0	£3,248,761	£0
	Jul-17	10	114	0	300,602,930	0	£3,903,106	£0
	Aug-17	15	153	0	397,697,350	0	£5,965,519	£0
	Sep-17	15	167	0	427,766,439	0	£6,829,259	£0
	Oct-17	16	195	0	438,961,748	0	£6,896,003	£0
	Nov-17	12	160	5	340,665,735	10,286,792	£6,387,835	£159,611
	Dec-17	16	107	127	274,431,689	291,078,121	£5,855,059	£5,591,348
	Jan-18	11	113	25	262,327,854	46,422,448	£4,494,813	£797,094
	Feb-18	12	97	108	216,608,779	273,054,254	£7,014,838	£4,980,381
Mar-18	18	91	272	224,375,159	676,525,099	£13,754,166	£11,718,284	

Table 1 - Services Procured

6. Gas Balancing										
The purpose of a gas balancing system management service is to enable National Grid, acting in its role as residual system balancer, to balance the gas inputs to and offtakes from the NTS, within acceptable levels. In order to achieve the desired gas flows, National Grid may carry out 'prompt' or 'forwards' gas trades or enter into forwards/options energy contracts.										
Service Component	Component Description and Details									
OCM 'Physical' trades to address a National Requirement	National 'Physical' Trades									
	Month	No. of days on which trades accepted	No. of Trade buys	No. of Trade sells	Quantity Purchased (kWh)	Quantity Sold (kWh)	Purchase cost (£)	Sell revenue (£)	Weighted Average Purchase Price (p/kWh)	Weighted Average Sell Price (p/kWh)
	No OCM Physical trades were conducted in this period to address a National Requirement.									
OCM 'Locational' trades to address a National Requirement	National 'Locational' Trades									
	Month	No. of days on which trades accepted	No. of Trade buys	No. of Trade sells	Quantity Purchased (kWh)	Quantity Sold (kWh)	Purchase cost (£)	Sell revenue (£)	Weighted Average Purchase Price (p/kWh)	Weighted Average Sell Price (p/kWh)
	No locational trades were conducted in this period to address a National Requirement.									
Gas Demand Side Response Trades	Demand Side Response Trades									
	Month	No. of days on which trades accepted	No. of Trade buys	No. of Trade sells	Quantity Purchased (kWh)	Quantity Sold (kWh)	Purchase cost (£)	Sell revenue (£)	Weighted Average Purchase Price (p/kWh)	Weighted Average Sell Price (p/kWh)
	No OCM Gas Demand Side Response 'Locational' trades to address a National Requirement.									

Table 1 - Services Procured

6. Gas Balancing

The purpose of a gas balancing system management service is to enable National Grid, acting in its role as residual system balancer, to balance the gas inputs to and offtakes from the NTS, within acceptable levels. In order to achieve the desired gas flows, National Grid may carry out 'prompt' or 'forwards' gas trades or enter into forwards/options energy contracts.

Service Component	Component Description and Details									
OCM 'Locational' trades to address a Localised Requirement	'Locational' Trades									
	Month	No. of days on which trades accepted	No. of Trade buys	No. of Trade sells	Quantity Purchased (kWh)	Quantity Sold (kWh)	Purchase cost (£)	Sell revenue (£)	Weighted Average Purchase Price (p/kWh)	Weighted Average Sell Price (p/kWh)
	<i>No locational trades were conducted in this period to address a Locational Requirement.</i>									

Table 1 - Services Procured**7. OCM Collateralisation Costs**

National Grid, in its role as the residual system balancer, incurs costs from its clearing member relating to provision of security / collateral in order to utilise the OCM for system balancing purposes. These are recovered from Users through the balancing neutrality charge.

For the period 1 April 2017 to 31 March 2018, National Grid incurred costs of £35,253.82.