Procurement Guidelines Report

Produced by National Grid Gas Transmission

For the Period

01 April 2020 – 31 March 2021

nationalgrid

Contents

1.0 EXECUTIVE SUMMARY

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

National Grid confirms that System Management Services during the period covered by this report has 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.

2.0 INTRODUCTION

2.1 Purpose of the document

This Procurement Guidelines Report ("Report") is published in accordance with Special Licence Condition 9.19.7 of National Grid's GT Licence, and provides information in respect of the procurement of System Management Services referred to in the Procurement Guidelines.

The Procurement Guidelines set out the types 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 Ofgem, 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.nationalgridgas.com/about-us/how-were-regulated/gas-industry-compliance

Or from:

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E-mail: incentives@nationalgrid.com

2.2 Reporting Period

The report includes details of System Management Services procured in relation to the gas flow period 1 April 2020 to 31 March 2021 inclusive.

This reporting period covers the last month of the Storage Year 2019/2020 (April 2020) and the majority of Storage Year 2020/2021 (May 2020 to March 2021).

3.0 PROCUREMENT OF SYSTEM MANAGEMENT SERVICES

3.1 Definition of System Management Services

Special Condition 9.19.7 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 National Transmission System (NTS) and includes balancing trades and balancing trade derivatives and constraint management services".

Table 1 summarises the System Management Services required for the following applications; These are: -

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

3.2 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: Aldbrough storage facility Hill Top Farm storage facility Holford storage facility Hornsea storage facility Humbly Grove storage facility Stublach storage facility Milford Haven Grain LNG importation terminal Power Stations

<table>
<tr><th>Service Component</th><th>Component Description and Details</th></tr>
<tr><td>Holdings Contracts (Capacity Arrangements)</td><td>For the period 1 April 2020 – 31 March 2021, National Grid procured OM as follows:
<table>
<tr><th>Month</th><th>Contract Type</th><th>Space (kWh)</th><th>Average Unit cost (p/kWh/annum)</th></tr>
<tr><td>Apr-20</td><td>Capacity Contracts</td><td>289,885,813</td><td>1.4942</td></tr>
<tr><td>May-20 to Mar-21</td><td>Capacity Contracts</td><td>294,281,877</td><td>1.1945</td></tr>
</table></td></tr>
<tr><td>Holdings Contracts (Delivery Arrangements)</td><td>For the period 1 April 2020 – 31 March 2021, National Grid procured OM as follows:
<table>
<tr><th>Month</th><th>Contract Type</th><th>OM Deliverability (kWh/d)</th><th>Average Price (p/kWh/d/annum)</th></tr>
<tr><td>Apr-20</td><td>Delivery Contracts</td><td>411,457,432</td><td>1.5661</td></tr>
<tr><td>May-20 to Mar-21</td><td>Delivery Contracts</td><td>542,142,228</td><td>1.1425</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Service Component</th><th>Component Description and Details</th></tr>
<tr><td>Gas Procurement</td><td>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) may source required gas by injecting gas that has been withdrawn from storage facilities with an Operating Margins gas surplus, or through a market tender process or through our trading desk.

For the period 1 April 2020 – 31 March 2021, National Grid procured 4,396,065kWh of OM gas.</td></tr>
<tr><td>Gas Disposal</td><td>For the period 1 April 2020 – 31 March 2021, National Grid (OM) procured this service as follows:
<table>
<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>
<tr><td>May-20</td><td>0</td><td>4,396,065</td><td>N/A</td><td>0.3506</td></tr>
</table></td></tr>
<tr><td>OM Transfer between Storage Facilities</td><td>National Grid (OM) utilises this service to address a gas-in-store surplus or deficit by transferring OM gas between Storage Facilities.

For the period 1 April 2020 – 31 March 2021, National Grid transferred 35,057,451 kWh of OM Gas between Storage Facilities.</td></tr>
<tr><td>OM Utilisation</td><td>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.

For the period 1 April 2020 – 31 March 2021, there was no OM service utilisation.</td></tr>
<tr><td colspan="2">Table 1 - Services Procured</td></tr>
</table>

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 2020 – 31 March 2021, 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 National Balancing Point (NBP), following the approval of Network Code Modification Proposals 0579 (Feb 2003) and 0599 (April 2004).	
Service Component	**Component Description and Details**

NBP Trades

For 1 April 2020 – 31 March 2021, National Grid procured NTS shrinkage via NBP trades as follows:

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-20	419,706,979	3,918,313	0.9336	1,201,591	6,901	0.5743
May-20	322,964,242	3,472,659	1.0752	132,028,486	601,978	0.4559
Jun-20	312,120,615	3,359,295	1.0763	73,121,215	332,600	0.4549
Jul-20	327,067,236	2,454,503	0.7505	81,327,203	373,651	0.4594
Aug-20	332,108,057	2,493,785	0.7509	49,587,613	310,448	0.6261
Sep-20	348,988,947	2,684,523	0.7692	8,967,973	89,539	0.9984
Oct-20	395,206,244	4,534,293	1.1473	111,366,980	1,446,150	1.2985
Nov-20	383,219,640	4,397,710	1.1476	96,010,060	1,209,866	1.2601
Dec-20	556,952,128	6,963,268	1.2502	3,839,230	58,698	1.5289
Jan-21	643,671,837	9,367,912	1.4554	14,213,944	312,990	2.2020
Feb-21	542,064,122	7,643,880	1.4101	879,213	14,040	1.5969
Mar-21	554,197,261	7,600,859	1.3715	160,602,908	2,486,763	1.5484

Service Component	Component Description and Details
Imbalance Cash-out	***From 1 April 2020 – 31 March 2021, National Grid's imbalance cash-out for the NTS shrinkage account was as follows:***

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-20	12,093,697	67,200	0.5557	2,306,320	8,824	0.3826
May-20	4,372,117	19,151	0.4380	7,717,964	30,987	0.4015
Jun-20	3,028,007	14,811	0.4891	3,816,872	16,716	0.4380
Jul-20	3,221,016	16,015	0.4972	3,601,332	14,688	0.4079
Aug-20	8,472,639	63,883	0.7540	1,848,573	12,968	0.7015
Sep-20	12,271,195	125,598	1.0235	2,103,553	20,913	0.9942
Oct-20	4,804,299	65,509	1.3636	5,587,776	71,276	1.2756
Nov-20	2,956,741	38,977	1.3182	6,536,204	81,320	1.2441
Dec-20	14,896,675	236,567	1.5881	618,289	8,638	1.3971
Jan-21	7,941,030	161,879	2.0385	4,132,076	77,697	1.8803
Feb-21	7,496,946	120,883	1.6124	3,371,775	51,917	1.5398
Mar-21	5,903,746	93,639	1.5861	4,961,258	75,643	1.5247

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 2020 – 31 March 2021, 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-20	None	0	0	0	0
May-20	None	0	0	0	0
Jun-20	None	0	0	0	0
Jul-20	None	0	0	0	0
Aug-20	None	0	0	0	0
Sep-20	None	0	0	0	0
Oct-20	None	0	0	0	0
Nov-20	None	0	0	0	0
Dec-20	None	0	0	0	0
Jan-21	None	0	0	0	0
Feb-21	None	0	0	0	0
Mar-21	None	0	0	0	0

Service Component	Component Description and Details
CMAs – Options Agreements	***For the period 1 April 2020 – 31 March 2021, National Grid procured these services as follows:***

Period	ASEP	Total Quantity Accepted (kWh)	Cost of Option (£)
Apr-20	None	0	0
May-20	None	0	0
Jun-20	None	0	0
Jul-20	None	0	0
Aug-20	None	0	0
Sep-20	None	0	0
Oct-20	None	0	0
Nov-20	None	0	0
Dec-20	None	0	0
Jan-21	None	0	0
Feb-21	None	0	0
Mar-21	None	0	0

Service Component	Component Description and Details
CMAs – Forwards Agreements	***For the period 1 April 2020 – 31 March 2021, National Grid procured these services as follows:***

Month	ASEP	Quantity utilised (kWh)	Total Cost of Forward Buybacks (£)
Apr-20	None	0	0
May-20	None	0	0
Jun-20	None	0	0
Jul-20	None	0	0
Aug-20	None	0	0
Sep-20	None	0	0
Oct-20	None	0	0
Nov-20	None	0	0
Dec-20	None	0	0
Jan-21	None	0	0
Feb-21	None	0	0
Mar-21	None	0	0

Service Component	Component Description and Details
CMAs – Options Utilisation	***For the period 1 April 2020 – 31 March 2021, National Grid procured these services as follows:***

Month	ASEP	Quantity utilised (kWh)	Total Cost of utilisation (exercise) (£)	No. of days on which option exercised
Apr-20	None	0	0	0
May-20	None	0	0	0
Jun-20	None	0	0	0
Jul-20	None	0	0	0
Aug-20	None	0	0	0
Sep-20	None	0	0	0
Oct-20	None	0	0	0
Nov-20	None	0	0	0
Dec-20	None	0	0	0
Jan-21	None	0	0	0
Feb-21	None	0	0	0
Mar-21	None	0	0	0

<table>
<tr><th>Service Component</th><th>Component Description and Details</th></tr>
<tr><td>Flow Management Agreements</td><td>For the period 1 April 2020 – 31 March 2021, National Grid procured these services as follows:

<table>
<tr><th>Month</th><th>Total Cost (£)</th></tr>
<tr><td>Apr-20</td><td>0</td></tr>
<tr><td>May-20</td><td>213,065</td></tr>
<tr><td>Jun-20</td><td>215,000</td></tr>
<tr><td>Jul-20</td><td>0</td></tr>
<tr><td>Aug-20</td><td>0</td></tr>
<tr><td>Sep-20</td><td>0</td></tr>
<tr><td>Oct-20</td><td>0</td></tr>
<tr><td>Nov-20</td><td>0</td></tr>
<tr><td>Dec-20</td><td>0</td></tr>
<tr><td>Jan-21</td><td>0</td></tr>
<tr><td>Feb-21</td><td>0</td></tr>
<tr><td>Mar-21</td><td>0</td></tr>
</table>

Costs shown are for a turn down agreement at an ASEP.</td></tr>
</table>

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: **Buybacks on Gemini**

Component Description and Details

For the period 1 April 2020 – 31 March 2021, 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-20	None	0	0	0	0
May-20	None	0	0	0	0
Jun-20	None	0	0	0	0
Jul-20	None	0	0	0	0
Aug-20	None	0	0	0	0
Sep-20	None	0	0	0	0
Oct-20	None	0	0	0	0
Nov-20	None	0	0	0	0
Dec-20	None	0	0	0	0
Jan-21	None	0	0	0	0
Feb-21	None	0	0	0	0
Mar-21	None	0	0	0	0

Service Component	Component Description and Details
CMAs – Options Agreements	***For the period 1 April 2020 – 31 March 2021, National Grid procured these services as follows:***

Period	Exit Point	Total Quantity Accepted (kWh)	Cost of Option (£)
Apr-20	None	0	0
May-20	None	0	0
Jun-20	None	0	0
Jul-20	None	0	0
Aug-20	None	0	0
Sep-20	None	0	0
Oct-20	None	0	0
Nov-20	None	0	0
Dec-20	None	0	0
Jan-21	None	0	0
Feb-21	None	0	0
Mar-21	None	0	0

Service Component	Component Description and Details
CMAs – Forwards Agreements	***For the period 1 April 2020 – 31 March 2021, National Grid procured these services as follows:***

Month	Exit Point	Quantity utilised (kWh)	Total Cost of Forward Buybacks (£)
Apr-20	None	0	0
May-20	None	0	0
Jun-20	None	0	0
Jul-20	None	0	0
Aug-20	None	0	0
Sep-20	None	0	0
Oct-20	None	0	0
Nov-20	None	0	0
Dec-20	None	0	0
Jan-21	None	0	0
Feb-21	None	0	0
Mar-21	None	0	0

Service Component	Component Description and Details
CMAs – Options Utilisation	***For the period 1 April 2020 – 31 March 2021, 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-20	None	0	0	0
May-20	None	0	0	0
Jun-20	None	0	0	0
Jul-20	None	0	0	0
Aug-20	None	0	0	0
Sep-20	None	0	0	0
Oct-20	None	0	0	0
Nov-20	None	0	0	0
Dec-20	None	0	0	0
Jan-21	None	0	0	0
Feb-21	None	0	0	0
Mar-21	None	0	0	0

Service Component	Component Description and Details
Flow Management Agreements	***For the period 1 April 2020 – 31 March 2021, National Grid procured these services as follows:***

Month	Total Cost (£)
Apr-20	0
May-20	0
Jun-20	0
Jul-20	0
Aug-20	0
Sep-20	0
Oct-20	0
Nov-20	0
Dec-20	0
Jan-21	0
Feb-21	0
Mar-21	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	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. ***During the period 1 April 2020 – 31 March 2021, National Grid carried out the following OCM trades:***

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-20	22	74	105	177,118,500	402,640,600	£829,331.50	£1,616,047.70
May-20	19	120	24	306,712,400	34,749,800	£1,355,639.50	£123,419.50
Jun-20	17	102	31	287,052,100	74,392,700	£1,047,313.70	£315,620.00
Jul-20	9	12	38	34,486,100	78,231,000	£172,530.00	£342,654.50
Aug-20	10	105	0	230,854,700	0	£1,909,282.00	£0
Sep-20	12	84	27	210,081,000	35,540,900	£2,349,398.20	£347,033.10
Oct-20	16	178	43	384,445,300	92,646,600	£5,099,448.90	£1,045,155.50
Nov-20	17	187	32	423,619,400	77,938,000	£5,629,129.40	£1,020,120.50
Dec-20	21	116	157	302,376,000	355,321,100	£5,290,606.30	£5,226739.40
Jan-21	20	57	193	102,930,900	515,006,100	£2,070,135.00	£9,557,556.70
Feb-21	18	318	30	743,985,600	54,234,300	£12,944,917.10	£781,254.30
Mar-21	22	215	93	472,814,100	350,252,200	£7,537,374.40	£3,911,172.00

<table>
<tr><th>Service Component</th><th>Component Description and Details</th></tr>
<tr><td>OCM ‘Physical’ trades to address a National Requirement</td><td>
<table>
<tr><th colspan="10">National ‘Physical’ Trades</th></tr>
<tr><th>Month</th><th>No. of days on which trades accepted</th><th>No. of Trade buys</th><th>No. of Trade sells</th><th>Quantity Purchased (kWh)</th><th>Quantity Sold (kWh)</th><th>Purchase cost (£)</th><th>Sell revenue (£)</th><th>Weighted Average Purchase Price (p/kWh)</th><th>Weighted Average Sell Price (p/kWh)</th></tr>
<tr><td colspan="10">No OCM Physical trades were conducted in this period to address a National Requirement.</td></tr>
</table>
</td></tr>
<tr><td>OCM ‘Locational’ trades to address a National Requirement</td><td>
<table>
<tr><th colspan="10">National ‘Locational’ Trades</th></tr>
<tr><th>Month</th><th>No. of days on which trades accepted</th><th>No. of Trade buys</th><th>No. of Trade sells</th><th>Quantity Purchased (kWh)</th><th>Quantity Sold (kWh)</th><th>Purchase cost (£)</th><th>Sell revenue (£)</th><th>Weighted Average Purchase Price (p/kWh)</th><th>Weighted Average Sell Price (p/kWh)</th></tr>
<tr><td colspan="10">No locational trades were conducted in this period to address a National Requirement.</td></tr>
</table>
</td></tr>
<tr><td>Gas Demand Side Response Trades</td><td>
<table>
<tr><th colspan="10">Demand Side Response Trades</th></tr>
<tr><th>Month</th><th>No. of days on which trades accepted</th><th>No. of Trade buys</th><th>No. of Trade sells</th><th>Quantity Purchased (kWh)</th><th>Quantity Sold (kWh)</th><th>Purchase cost (£)</th><th>Sell revenue (£)</th><th>Weighted Average Purchase Price (p/kWh)</th><th>Weighted Average Sell Price (p/kWh)</th></tr>
<tr><td colspan="10">No OCM Gas Demand Side Response ‘Locational’ trades to address a National Requirement.</td></tr>
</table>
</td></tr>
</table>

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)
Apr-20	5	0	11	0	184,634,730	0	£503,197.00	0	0.2920
Mar-21	5	2	49	5,861,420	241,050,899	£120,000.00	£2,270,873.00	2.0473	0.9764

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 2020 to 31 March 2021, National Grid incurred costs of £39,532.59.