Procurement Guidelines Report

For the Period 01 April 2015 – 31 March 2016

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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 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 http://www2.nationalgrid.com/UK/Industry-information/Business-compliance/Procurement-and-System-Management-Documents/

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1.2 Reporting Period

This Report has been prepared in accordance with Part B of Special Condition 8a. This Condition states that the Report should be produced within one month after the publication date of the Procurement Guidelines which are prepared in accordance with Part B of this Condition.

The report includes details of System Management Services procured in relation to the gas flow period 1 April 2015 to 31 March 2016 inclusive.

This reporting period covers the last month of the Storage Year 2014/2015(April 2015) and the majority of Storage Year 2015/2016 May 2015 to March 2016).

2. Procurement of System Management Services

2.1 Definition of System Management Services

Special Condition 8a 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.

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 Description and Details
Component	
Holdings	National Grid (OM) procured this service at the following facilities:
Contracts	NG LNG storage facilities (Avonmouth)
(Capacity and	Dragon LNG
Deliverability	Rough storage facility
Arrangements)	Hornsea storage facility
	Hole House Farm storage facility
	Hatfield Moor storage facility
	Humbly Grove storage facility
	Grain LNG Importation terminal

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	Service Component Description and Details Component						
Holdings Contracts (Capacity	For the perio	od 1 April 2015 – 31 Ma	arch 2016, National	Grid (OM) procured	Operating Margins as follows:		
Arrangements)	Month	Contract Type	Space (kWh)	Average Unit cost (p/kWh/annum)			
	Apr-15	Capacity Contracts	999,236,633	1.8248			
	May-15 to Mar-16	Capacity Contracts	985,535,083	1.8077			

For the period 1 April 2015 – 31 March 2016, National Grid (OM) procured Operating Margins as follows:

Month	Contract Type	OM Deliverability (kWh/d)	Average Price (p/kWh/d/annum)
Apr-15	Delivery Contracts	163,594,167	2.0717
May-15 to Mar-16	Delivery Contracts	184,149,363	2.0915

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 De	escription and D	Details			
Gas Procurement						
Gas Disposal	held Operating M or withdraws gas bid to buy gas eit	largins Capacity A to inject into stora her in store or at t	arrangements. National age facilities with an Ophe NBP.	urplus at a given storage Grid (OM) either issues a perating Margins gas defice Grid (OM) procured this	a tender to Users cit. Typically, Nat	to meet its requirements ional Grid invites Users t
	Month	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)	

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
OM Transfer between Storage Facilities	National Grid (OM) utilises this service to address a gas-in-store surplus or deficit by transferring OM gas between Storage Facilities. No OM Transfers have occurred between Storage Facilities between 1 April 2015 and 31 March 2016.
OM Utilisation	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. No OM utilisations have occurred between 1 April 2015 and 31 March 2016.

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 2015 – 31 March 2016

Month	Facility	Shipper Booked Deliverability (kWh)	Transportation Credit (p/kWh/day)
Apr 2015 to March 2016	Avonmouth LNG	0	N/A

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 Description and Details
Component	
NBP	For 1 April 2015 to 31 March 2016, National Grid procured NTS shrinkage via NBP trades as follows:
Trades	

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-15	273,992,078	£4,676,828	1.70692	14,800,086	£232,710	1.57236
May-15	274,167,921	£4,677,330	1.70601	72,974,679	£1,100,655	1.50827
Jun-15	320,766,210	£5,340,510	1.66492	39,418,050	£575,480	1.45994
Jul-15	296,001,710	£4,641,406	1.56803	78,484,414	£1,167,217	1.48720
Aug-15	578,668,690	£8,361,297	1.44492	732,678	£9,425	1.28638
Sep-15	320,619,674	£4,952,488	1.54466	10,872,934	£152,178	1.39960
Oct-15	401,858,955	£6,227,572	1.54969	1,318,820	£18,150	1.37623
Nov-15	429,114,558	£6,521,249	1.51970	0	£0	0.00000
Dec-15	626,820,255	£8,952,614	1.42826	1,465,355	£17,410	1.18811
Jan-16	324,429,597	£4,595,766	1.41657	6,594,098	£74,790	1.13420
Feb-16	292,572,779	£4,158,842	1.42147	732,678	£7,213	0.98440
Mar-16	297,906,672	£4,293,773	1.44131	33,996,236	£337,760	0.99352

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 Description and Details
Component	
Imbalance	From 1 April 2015 to 31 March 2016, National Grid's imbalance cash-out for the NTS shrinkage account was as
Cash-out	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-15	5,920,165	95,243	1.6088	4,431,497	71,706	1.6181
May-15	4,347,630	66,294	1.5248	2,699,160	40,584	1.5036
Jun-15	12,390,816	188,295	1.5196	1,993,398	29,634	1.4866
Jul-15	2,728,712	41,746	1.5299	7,873,889	114,359	1.4524
Aug-15	13,825,653	190,044	1.3746	4,340,059	59,533	1.3717
Sep-15	6,034,372	87,388	1.4482	6,435,480	88,758	1.3792
Oct-15	7,755,573	106,175	1.3690	2,288,667	30,395	1.3281
Nov-15	10,567,339	134,991	1.2774	1,539,531	18,192	1.1816
Dec-15	5,418,594	67,712	1.2496	7,080,379	78,129	1.1035
Jan-16	5,081,349	57,925	1.1400	2,758,644	28,773	1.0430
Feb-16	3,623,095	38,230	1.0552	3,062,766	29,418	0.9605
Mar-16	4,542,538	47,580	1.0474	4,512,916	42,278	0.9368

4. Entry Capacity Management

Service Component	Component Description and Details									
Buybacks on Gemini	For the period 1 April 2015 – 31 March 2016, National Grid procured these services as for									
	Month	ASEP	No. of days on which offers accepted	No. of offers accepted	Quantity accepted (kWh)	Weighted average price (p/kWh)				
	Apr-15	None	0	0	0	0				
	May-15	None	0	0	0	0				
	Jun-15	None	0	0	0	0				
	Jul-15	None	0	0	0	0				
	Aug-15	None	0	0	0	0				
	Sep-15	None	0	0	0	0				
	Oct-15	None	0	0	0	0				
	Nov-15	None	0	0	0	0				
	Dec-15	None	0	0	0	0				
	Jan-16	None	0	0	0	0				
	Feb-16	None	0	0	0	0				
	Mar-16	None	0	0	0	0				

4. Entry Capacity Management

Service Component	Component Description and Details								
CMAs – Options Agreements	For the period 1 April 2015 – 31 March 2016, National Grid procured these services as follows								
	Period	ASEP	Total Quantity Accepted (kWH)	Cost of Option (£)					
	Apr-15	None	0	0					
	May-15	None	0	0					
	Jun-15	None	0	0					
	Jul-15	None	0	0					
	Aug-15	None	0	0					
	Sep-15	None	0	0					
	Oct-15	None	0	0					
	Nov-15	None	0	0					
	Dec-15	None	0	0					
	Jan-16	None	0	0					
	Feb-16	None	0	0					
	Mar-16	None	0	0					

4. Entry Capacity Management

Service Component	Component Description and Details							
CMAs – Forwards Agreements	For the period 1 April	2015 – 31 Marc	h 2016, National Grid	onal Grid procured these services as follows:				
	Month	ASEP	Quantity utilised (kWh)	Total Cost of Forward Buybacks (£)				
	Apr-15	None	0	0				
	May-15	None	0	0				
	Jun-15	None	0	0				
	Jul-15	None	0	0				
	Aug-15	None	0	0				
	Sep-15	None	0	0				
	Oct-15	None	0	0				
	Nov-15	None	0	0				
	Dec-15	None	0	0				
	Jan-16	None	0	0				
	Feb-16	None	0	0				
	Mar-16	None	0	0				

4. Entry Capacity Management

Service Component

The purpose of an entry capacity management service is to enable National Grid to efficiently manage 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 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.

Component Description and Details

sation	Month	ASEP	Quantity utilised (kWh)	Total Cost of utilisation (exercise) (£)	No. of days on which option exercised
	Apr-15	None	0	0	0
	May-15	None	0	0	0
	Jun-15	None	0	0	0
	Jul-15	None	0	0	0
	Aug-15	None	0	0	0
	Sep-15	None	0	0	0
	Oct-15	None	0	0	0
	Nov-15	None	0	0	0
	Dec-15	None	0	0	0
	Jan-16	None	0	0	0
	Feb-16	None	0	0	0
	Mar-16	None	0	0	0

4. Entry Capacity Management

Service Component			nponent Descripti	
Flow Management Agreements	For the period 1 Ap	ril 2015 – 31 Ma	arch 2016, Nationa	Il Grid procured these services as follows:
	Month	ASEP	Total Cost (£)	
	Apr-15	None	0	
	May-15	None	0	
	Jun-15	None	0	
	Jul-15	None	0	
	Aug-15	None	0	
	Sep-15	None	0	
	Oct-15	None	0	
	Nov-15	None	0	
	Dec-15	None	0	
	Jan-16	None	0	
	Feb-16	None	0	
	Mar-16	None	0	
				_

5. Exit Capacity Management

Service Component

The purpose of an exit capacity management service is to enable the system to accommodate gas flows in accordance with Users' 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 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.

Component Description and Details

Month	Exit Point	No. of days on which offers accepted	No. of offers accepted	Quantity accepted (kWh)	Weighted average price (p/kWh)
Apr-15	None	0	0	0	0
May-15	None	0	0	0	0
Jun-15	None	0	0	0	0
Jul-15	None	0	0	0	0
Aug-15	None	0	0	0	0
Sep-15	None	0	0	0	0
Oct-15	None	0	0	0	0
Nov-15	None	0	0	0	0
Dec-15	None	0	0	0	0
Jan-16	None	0	0	0	0
Feb-16	None	0	0	0	0

Mar-16

None

0

0

0

0

5. Exit Capacity Management

Service Component	Component Description and Details							
CMAs - Options	For the period 1 April 2015 – 31 March 2016, National Grid procured these services as follows:							
Agreements				,				
	Period	Exit Point	Total Quantity Accepted (kWH)	Cost of Option (£)				
	Apr-15	None	0	0				
	May-15	None	0	0				
	Jun-15	None	0	0				
	Jul-15	None	0	0				
	Aug-15	None	0	0				
	Sep-15	None	0	0				
	Oct-15	None	0	0				
	Nov-15	None	0	0				
	Dec-15	None	0	0				
	Jan-16	None	0	0				
	Feb-16	None	0	0				
	Mar-16	None	0	0				

5. Exit Capacity Management

Service Component	Component Description and Details							
CMAs – Forwards Agreements	For the period 1 April 2015 – 31 March 2016, National Grid procured these services as fo							
	Month	Exit Point	Quantity utilised (kWh)	Total Cost of Forward Buybacks (£)				
	Apr-15	None	0	0				
	May-15	None	0	0				
	Jun-15	None	0	0				
	Jul-15	None	0	0				
	Aug-15	None	0	0				
	Sep-15	None	0	0				
	Oct-15	None	0	0				
	Nov-15	None	0	0				
	Dec-15	None	0	0				
	Jan-16	None	0	0				
	Feb-16	None	0	0				
	Mar-16	None	0	0				

5. Exit Capacity Management

Service Component CMAs – Options Utilisation	For the period 1 April		onent Description h 2016, National G		e services as fo
	Month	Exit Point	Quantity utilised (kWh)	Total Cost of utilisation (option+exercise) (£)	No. of days on which option exercised
	Apr-15	None	0	0	0
	May-15	None	0	0	0
	Jun-15	None	0	0	0
	Jul-15	None	0	0	0
	Aug-15	None	0	0	0
	Sep-15	None	0	0	0
	Oct-15	None	0	0	0
	Nov-15	None	0	0	0
	Dec-15	None	0	0	0
	Jan-16	None	0	0	0
	Feb-16	None	0	0	0
	Mar-16	None	0	0	0

5. Exit Capacity Management

Service Component		Component D	escription and Details	
Flow Management Agreements	For the period 1 April			these services as follows
	Month	Exit Point	Total Cost (£)	
	Apr-15	None	0	
	May-15	BAGLANBAYPS	0	
	Jun-15	BAGLANBAYPS	0	
	Jul-15	BAGLANBAYPS	0	
	Aug-15	None	0	
	Sep-15	None	0	
	Oct-15	None	0	
	Nov-15	None	0	
	Dec-15	None	0	
	Jan-16	None	0	
	Feb-16	None	0	
	Mar-16	None	0	

6. Gas Balancing

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 2015 to 31 March 2016, National Grid carried out the following OCM trades:

6. Gas Balancing

Service Component		Component Description and Details							
OCM 'Title' trades to address a	National 'NBP Title' Trades								
National Requirement	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-2015	14	30	166	75,758,855	392,744,451	£1,348,716	£6,179,506	
	May-2015	7	42	10	81,327,207	21,540,719	£1,304,269	£315,427	
	Jun-2015	9	60	10	110,839,456	22,419,932	£1,663,457	£322,845	
	Jul-2015	12	93	12	208,256,258	26,171,240	£3,143,821	£374,602	
	Aug-2015	10	70	20	147,942,246	40,326,573	£2,062,219	£539,399	
	Sep-2015	5	30	9	80,008,384	22,566,468	£1,160,237	£300,304	
	Oct-2015	6	18	41	39,681,815	81,473,739	£559,612	£1,072,781	
	Nov-2015	15	192	0	460,795,545	0	£5,909,739	£0	
	Dec-2015	10	36	106	70,630,116	222,704,663	£891,315	£2,564,722	
	Jan-2016	12	120	16	280,996,477	33,234,253	£3,166,036	£345,447	
	Feb-2016	8	69	15	154,477,726	37,249,325	£1,603,935	£363,468	
	Mar-2016	7	39	38	78,748,179	87,012,783	£785,346	£806,926	

6. Gas Balancing

Service Component	Component Description and Details										
OCM 'Physical'											
trades to address a											
National	National 'Physical' Trades										
Requirement	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										

6. Gas Balancing

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)	
	No locational trades were conducted in this period to address a Locational Requirement										

7. OCM Collateralisation Costs

National Grid, in its role as the residual system balancer, is required to provide collateralisation to ICE Endex in order to utilise the OCM for system balancing purposes. The costs incurred by National Grid to provide the collateralisation are recovered from the Users through a balancing neutrality charge.

For the period 1 April 2015 to 31 March 2016, National Grid incurred OCM collateralisation costs of £115,000.