

Procurement Guidelines Report

For the Period
01 April 2010 – 31 March 2011

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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) License 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 Gas considers that such activities satisfy its relevant License 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 C5 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 National Grid’s Network Code, as the case may be.

Further copies of this Report may be obtained from <http://www.nationalgrid.com/uk/Gas/OperationalInfo/>

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1.2 Reporting Period

This Report has been prepared in accordance with paragraph 4 of Special Condition C5. 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 paragraph 3 of this Condition.

The report includes details of System Management Services procured in relation to the gas flow period 1 April 2010 to 31 March 2011 inclusive.

This reporting period covers the last month of the Storage Year 2009/2010 (April 2010) and the majority of Storage Year 2010/2011 (May 2010 to March 2011).

2. Procurement of System Management Services

2.1 Definition of System Management Services

Special Condition C5 (paragraph 15) 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:

- Gas Balancing
- Entry Capacity Management
- Exit Capacity Management
- Operating Margins gas
- Shrinkage
- Constrained Storage
- 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 (space and deliverability)	National Grid (OM) procures this service at the following storage facilities:					
	<ul style="list-style-type: none"> ▪ NG LNG storage facilities (Avonmouth, Glenmavis, Partington) ▪ Rough storage facility ▪ Hornsea storage facility ▪ Hole House Farm storage facility ▪ Grain LNG Importation terminal 					
	At National Grid LNG storage facilities, National Grid (OM) has priority over all other Users in procuring Storage Capacity for OM purposes. However, at Rough, Hornsea and Hole House Farm, National Grid (OM) has the same rights as any other User. Post conversion of the Isle of Grain LNG facility from a storage facility to an LNG importation facility (15 th July 2005), capacity holders at Grain provide an OM service to National Grid.					
	<i>For the period 1 April 2010 – 31 March 2011, National Grid Gas (OM) procured Operating Margins as follows:</i>					
	Month	Facility	Space (kWh)	Unit cost (p/kWh/annum)	Deliverability (kWh/d)	Unit cost (p/kWh)
	Apr-10	Hornsea	80,000,000	1.7578	0	0
		Hole House Farm	25,000,000	1.4500	0	0
		Rough	480,000,000	0.3412	0	0
		Rough	82,500,000	0.3753	0	0
		Avonmouth	194,500,000	1.5810	0	0
Glenmavis		128,500,000	1.8430	0	0	
Partington		219,500,000	1.1730	0	0	
May-10 to Mar-11	Hornsea	35,200,000	1.4834	0	0	
	Glenmavis	119,300,000	1.8360	0	0	
	Avonmouth	186,200,000	1.5750	0	0	
	Hornsea	49,000,000	1.3649	0	0	
	Rough	515,600,000	0.4507	0	0	
	Hole House Farm	25,000,000	1.5200	0	0	
	Partington	77,000,000	1.1690	43,700,000	1.0700	
Apr-10 to Dec-10	Grain LNG Importation Terminal	120,000,000	7.7537	0	0	
Jan-11 to Mar-11	Grain LNG Importation Terminal	93,000,000	8.1030	0	0	

Holdings Contracts (Delivery Arrangements)	<p>National Grid Gas (OM) procures demand reduction and supply increase services for OM provision.</p> <p><i>For the period 1 April 2010 – 31 March 2011, National Grid Gas (OM) procured Operating Margins as follows:</i></p> <table border="1"> <thead> <tr> <th>Month</th> <th>Contract</th> <th>OM Deliverability (kWh/d)</th> <th>Price (p/kWh/d/annum)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">May-10 to Mar-11</td> <td>Portfolio of Offtake Reduction and Supply Increase</td> <td>16,800,000</td> <td>1.5000</td> </tr> <tr> <td>Portfolio of Offtake Reduction</td> <td>18,000,000</td> <td>2.0000</td> </tr> <tr> <td>LNG Importation with Storage</td> <td>53,200,000</td> <td>2.4910</td> </tr> </tbody> </table>	Month	Contract	OM Deliverability (kWh/d)	Price (p/kWh/d/annum)	May-10 to Mar-11	Portfolio of Offtake Reduction and Supply Increase	16,800,000	1.5000	Portfolio of Offtake Reduction	18,000,000	2.0000	LNG Importation with Storage	53,200,000	2.4910
Month	Contract	OM Deliverability (kWh/d)	Price (p/kWh/d/annum)												
May-10 to Mar-11	Portfolio of Offtake Reduction and Supply Increase	16,800,000	1.5000												
	Portfolio of Offtake Reduction	18,000,000	2.0000												
	LNG Importation with Storage	53,200,000	2.4910												
Gas-in-storage 'Swap' tender	<p>National Grid Gas (OM) utilises this service to address OM gas surpluses and deficits. National Grid Gas (OM) issues a 'swap tender' to Users, offering to trade gas in store at a facility where National Grid Gas has an OM surplus for shipper gas in store at a different facility where there is an OM deficit. Users may offer a payment to National Grid Gas or receive a payment from National Grid Gas, reflecting the different injection values attached to the gas.</p> <p><i>No Gas-in-storage SWAP tenders have been made between 1 April 2010 and 31 March 2011.</i></p>														

Gas Procurement	<p>National Grid Gas (OM) utilises this service to address an Operating Margins gas deficit at a given storage facility where National Grid Gas holds Operating Margins Capacity Arrangements. National Grid Gas (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 Gas invites Users to offer to sell gas either in store or at the NBP although National Grid Gas 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 2010 – 31 March 2011, National Grid (OM) procured this service as follows:</i></p> <table border="1"> <thead> <tr> <th>Month</th> <th>Facility</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>May-10</td> <td>Hornsea</td> <td>0</td> <td>4,199,391</td> <td>0</td> <td>1.1499</td> </tr> </tbody> </table>	Month	Facility	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)	May-10	Hornsea	0	4,199,391	0	1.1499															
Month	Facility	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)																							
May-10	Hornsea	0	4,199,391	0	1.1499																							
Gas Disposal	<p>National Grid Gas (OM) utilises this service to address a gas surplus at a given storage facility where National Grid Gas holds or has held Operating Margins Capacity Arrangements. National Grid Gas (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 Gas invites Users to bid to buy gas either in store or at the NBP.</p> <p><i>For the period 1 April 2010 – 31 March 2011, National Grid (OM) procured this service as follows:</i></p> <table border="1"> <thead> <tr> <th>Month</th> <th>Facility</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 rowspan="4">May-10</td> <td>Rough</td> <td>46,439,792</td> <td>0</td> <td>1.1603</td> <td>0</td> </tr> <tr> <td>Avonmouth</td> <td>1,950,000</td> <td>0</td> <td>1.1792</td> <td>0</td> </tr> <tr> <td>Partington</td> <td>142,488,926</td> <td>0</td> <td>1.1432</td> <td>0</td> </tr> <tr> <td>Glenmavis</td> <td>9,200,000</td> <td>0</td> <td>1.1431</td> <td>0</td> </tr> </tbody> </table>	Month	Facility	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)	May-10	Rough	46,439,792	0	1.1603	0	Avonmouth	1,950,000	0	1.1792	0	Partington	142,488,926	0	1.1432	0	Glenmavis	9,200,000	0	1.1431	0
Month	Facility	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)																							
May-10	Rough	46,439,792	0	1.1603	0																							
	Avonmouth	1,950,000	0	1.1792	0																							
	Partington	142,488,926	0	1.1432	0																							
	Glenmavis	9,200,000	0	1.1431	0																							

OM Transfer between Storage Facilities	National Grid Gas (OM) utilises this service to address a gas-in-store surplus or deficit by transferring OM gas between Storage Facilities. <i>No Transfers between storage facilities have been made between 1 April 2010 and 31 March 2011.</i>
OM Utilisation	National Grid Gas (OM) utilises Operating Margins services to ensure Operational Balancing capability in the event of a supply failure, demand forecast change or plant failure. <i>No Utilisations have occurred between 1 April 2010 and 31 March 2011.</i>

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 2010 – 31 March 2011, National Grid procured this service as follows:

Month	Facility	Shipper Booked Deliverability (kWh)	Transportation Credit (p/ kWh/day)
Apr-10	Avonmouth	143,000,000	0.0041

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>From 1 April 2010 to 31 March 2011, National Grid procured shrinkage via NBP trades 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-10	1,264,191,066	£14,174,318	1.1212	26,115,293	£287,471	1.1008
	May-10	841,524,069	£10,387,736	1.2344	13,470,364	£170,842	1.2683
	Jun-10	844,572,008	£11,286,084	1.3363	34,485,987	£454,524	1.3180
	Jul-10	666,355,533	£9,655,953	1.4491	71,802,395	£1,112,968	1.550
	Aug-10	543,412,248	£7,627,772	1.4037	43,374,508	£629,058	1.4503
	Sep-10	473,309,665	£6,340,750	1.3397	174,670,316	£2,431,595	1.3921
	Oct-10	579,987,509	£9,837,310	1.6961	61,896,595	£941,168	1.5205
	Nov-10	747,506,893	£12,795,005	1.7117	121,624,465	£1,944,063	1.5984
	Dec-10	651,467,526	£11,790,284	1.8098	16,851,583	£392,750	2.3306
	Jan-11	666,033,155	£11,931,513	1.7914	56,269,632	£1,029,725	1.8300
	Feb-11	662,252,539	£11,793,540	1.7808	118,986,826	£2,174,350	1.8274
	Mar-11	762,863,813	£14,096,793	1.8479	186,979,298	£3,865,313	2.0672

Imbalance Cash-out	<i>From 1 April 2010 to 31 March 2011, National Grid's imbalance cash-out for the NTS shrinkage account was as follows:</i>						
	Month	Quantity Purchased (under delivered) (kWh)	Purchase Cost (at SMP _b) (£)	Weighted Average Cost (p/kWh)	Quantity Sold (over delivered) (kWh)	Sell Revenue (at SMP _s) (£)	Weighted Average Revenue (p/kWh)
	Apr-10	7,350,805	£85,862	1.1681	10,186,977	£109,446	1.0744
	May-10	15,236,737	£210,635	1.3824	9,443,031	£121,790	1.2897
	Jun-10	16,978,930	£247,199	1.4559	1,215,541	£16,221	1.3345
	Jul-10	0	£0	0.0000	0	£0	0.0000
	Aug-10	0	£0	0.0000	0	£0	0.0000
	Sep-10	0	£0	0.0000	0	£0	0.0000
	Oct-10	0	£0	0.0000	0	£0	0.0000
	Nov-10	0	£0	0.0000	0	£0	0.0000
	Dec-10	0	£0	0.0000	0	£0	0.0000
	Jan-11	0	£0	0.0000	0	£0	0.0000
	Feb-11	0	£0	0.0000	0	£0	0.0000
	Mar-11	0	£0	0.0000	0	£0	0.0000

4. Entry Capacity Management

The purpose of an entry capacity management service is to enable National Grid Gas 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 Gas may buyback entry capacity from Users via the Gemini entry capacity system or it may enter into Capacity Management Agreements (CMAs).

For the period 1 April 2010 – 31 March 2011, National Grid Gas procured these services as follows:

Service Component	Component Description and Details					
Buybacks on Gemini						
	Month	ASEP	No. of days on which offers accepted	No. of offers accepted	Quantity accepted (kWh)	Weighted average price (p/kWh)
	Apr-10	None	0	0	0	0
	May-10	None	0	0	0	0
	Jun-10	None	0	0	0	0
	Jul-10	None	0	0	0	0
	Aug-10	None	0	0	0	0
	Sep-10	None	0	0	0	0
	Oct-10	None	0	0	0	0
	Nov-10	None	0	0	0	0
	Dec-10	None	0	0	0	0
	Jan-11	None	0	0	0	0
	Feb-11	None	0	0	0	0
	Mar-11	None	0	0	0	0

CMA – Options Agreements	Period	ASEP	Total Quantity Accepted (kWh)	Cost of Option (£)
	May-10	None	0	0
	Jun-10	None	0	0
	Jul-10	None	0	0
	Aug-10	None	0	0
	Sep-10	None	0	0
	Oct-10	None	0	0
	Nov-10	None	0	0
	Dec-10	None	0	0
	Jan-11	None	0	0
	Feb-11	None	0	0
	Mar-11	None	0	0

CMA – Forwards Agreements	Month	ASEP	Quantity utilised (kWh)	Total Cost of Forward Buybacks (£)
	May-10	None	0	0
	Jun-10	None	0	0
	Jul-10	None	0	0
	Aug-10	None	0	0
	Sep-10	None	0	0
	Oct-10	None	0	0
	Nov-10	None	0	0
	Dec-10	None	0	0
	Jan-11	None	0	0
	Feb-11	None	0	0
	Mar-11	None	0	0

CMA – Options Utilisation	Month	ASEP	Quantity utilised (kWh)	Total Cost of utilisation (option+exercise) (£)	No. of days on which option exercised
	Apr-10	None	0	0	0
	May-10	None	0	0	0
	Jun-10	None	0	0	0
	Jul-10	None	0	0	0
	Aug-10	None	0	0	0
	Sep-10	None	0	0	0
	Oct-10	None	0	0	0
	Nov-10	None	0	0	0
	Dec-10	None	0	0	0
	Jan-11	None	0	0	0
	Feb-11	None	0	0	0
	Mar-11	None	0	0	0

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' exit capacity rights. In the event of desired exit flows exceeding capability, National Grid may procure a range of demand/supply side services (including interruption) in order to achieve the desired changes in gas flows. The interruption services may be procured to manage NTS constraints and/or Network Gas Supply Emergencies.

Service Component	Component Description and Details
Interruption to manage NTS constraints	<p>On 1 April 2010, National Grid had interruption access to 26 sites (NTS Power Stations, Industrial Sites and the Moffat Interconnector) with an aggregate potential available interruption of 965.6 GWh (excluding Bacton)</p> <p>In addition, the NTS also had access to a potential 628.4 GWh of Interruption at the Bacton Interconnector along with 9 Storage Sites (excluding Dynevor Arms) that have exit capacity of an interruptible basis available during the summer months.</p> <p><i>During the period 01 April 2010 to 31 March 2011, National Grid had no requirement to initiate interruption . There was no requirement for a National Gas Supply Emergency.</i></p>

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' gas trades or enter into forwards/options energy contracts ('non-gas-trade' tools which may be used for achieving gas balance are covered under 'entry capacity management' and 'exit capacity management').

Service Component	Component Description and Details
OCM trades	<p>National Grid trades on 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>During the period 1 April 2010 to 31 March 2011, National Grid carried out the following OCM trades:</p>

OCM 'Title' trades to address a National Requirement	National 'NBP Title' 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-10	17	119	121	262,152,019	312,472,309	2,922,335	3,381,624	1.1147	1.0822
	May-10	19	82	157	165,379,969	402,445,109	2,468,547	5,317,300	1.4927	1.3212
	Jun-10	17	8	218	19,049,616	523,043,832	302,078	7,270,365	1.5857	1.3900
	Jul-10	15	118	67	279,882,812	145,949,362	4,366,075	2,197,210	1.5600	1.5055
	Aug-10	16	124	117	246,765,793	266,108,473	3,676,125	3,708,509	1.4897	1.3936
	Sep-10	19	68	144	146,476,890	334,394,021	2,248,357	4,306,659	1.5350	1.2879
	Oct-10	19	119	197	289,729,996	529,110,394	4,593,135	7,626,066	1.5853	1.4413
	Nov-10	14	112	57	218,513,740	125,112,013	4,017,573	2,045,704	1.8386	1.6351
	Dec-10	21	88	257	186,481,086	650,090,114	4,092,683	13,273,656	2.1947	2.0418
	Jan-11	20	71	177	164,676,596	440,573,651	3,189,604	8,339,065	1.9369	1.8928
	Feb-11	14	62	130	257,111,191	327,184,469	4,825,866	5,876,864	1.8770	1.7962
	Mar-11	17	14	249	42,290,145	539,748,876	918,153	10,874,559	2.1711	2.0147

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)
	<i>No OCM Physical trades were conducted in this period to address a National Requirement.</i>									
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)
	<i>No locational trades were conducted in this period to address a National Requirement</i>									
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-10	2	0	16	0	213,941,831	0	1,676,024	0	0.7834
	Aug-10	2	0	17	0	48,415,329	0	567,734	0	1.1726
	Nov-10	1	0	2	0	6,857,861	0	110,028	0	1.6044

7. OCM Collateralisation Costs

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

For the period 1 April 2010 to 31 March 2011, National Grid Gas incurred OCM collateralization costs of £91,534.25.