National Grid LNG Storage

2015 Annual Storage Invitation

Version 2.0

Document control

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NATIONAL GRID LNG STORAGE
2015 ANNUAL STORAGE INVITATION

1. Introduction

1.1. National Grid LNG Storage, the business unit within National Grid with responsibility for LNG storage operations, invites applications for Storage Capacity and Tanker Filling Slots in the National Grid LNG Storage Facility at Avonmouth for Storage Year 2015/16 in accordance with provisions of the Uniform Network Code and the information contained within this Annual Storage Invitation.

1.2. For Storage Year 2015/16 Storage Capacity and Tanker Filling Slots will be offered via a pay as bid tender process made up of three bidding rounds or stages ("Stage 1", "Stage 2 " and "Stage 3" respectively). Anyone wishing to apply for capacity, or Tanker Filling Slots, in any stage (the "Applicants") must return the completed application forms to National Grid LNG Storage by 12:00 hours on the relevant invitation close date these being:

a) 23rd March 2015 in respect of Stage 1

b) 25th March 2015 in respect of Stage 2

c) 27th March 2015 in respect of Stage 3

Each of the above dates shall be the "National Grid LNG Invitation Close Date" in respect of the stage in question. For the avoidance of doubt Applicants may submit application forms for all stages.

1.3. Commercial Operations communications will be via the National Grid LNG Storage Customer Access and LNG Management System ("CALMS"). A copy of the CALMS manual, which defines training, helpdesk and the transactions carried out, can be requested from National Grid LNG Storage.

1.4. Terms not defined in this Annual Storage Invitation have the meaning given in the Uniform Network Code.

1.5. Should the terms in this Annual Storage Invitation conflict with those in the Uniform Network Code then the terms of the Uniform Network Code shall take precedence.

2. Description of Services Available

General

2.1. Users may purchase Storage Capacity and Tanker Filling Slots at the National Grid LNG Storage Facility at Avonmouth.

2.2. Section Z of the Uniform Network Code further defines the storage services available.

2.3. The National Grid LNG Injection Period, as defined in Section Z 5.1.1, shall end on 31st October 2015.

2.4. Section Z 3.5.4 states that National Grid LNG must stipulate the fixed Storage Duration in respect of Storage capacity to be applied for. The Storage Duration period for each stage will be:

a) Stage 1 – 12 month fixed Storage Duration starting 01st May 2015 to 30th April 2016

b) Stage 2 – 6 months fixed Storage Duration starting 01st May 2015 to 31st October 2015

c) Stage 3 – 6 months fixed Storage Duration starting 01st May 2015 to 31st October 2015

Constrained Services

2.5. In 2015/16 National Grid does not require a minimum inventory level to be held at Avonmouth.

2.6. A copy of National Grid's Constrained Storage Statement is contained in Appendix 8 and gives details of Constrained Points and Constrained Threshold Demand Flows, Weekly Minimum Requirements and Transportation Credits. Additional rules regarding the use of these facilities are given in Uniform Network Code Section R4.

3. General Information

3.1. Indicative Quantities Available and Reserve Prices are given in Appendix 1.

3.2. Storage Injection, Withdrawal and Tanker Filling Charges are given in Appendix 2.

3.3. Carry Over Charges for Uncovered Gas in Store are given in Appendix 3.

3.4. Planned Maintenance Outages are given in Appendix 4.

3.5. Maximum Storage Capacity is given in Appendix 5.

3.6. Withdrawal Standby States, Lead Times, Standby Conditions and Charges are given in Appendix 6.

3.7. Monthly Injection Overrun Cap / Permitted Deliverability Overrun Charges is given in Appendix 7.

3.8. The Constrained Storage Statement is given in Appendix 8.

3.9. The Application Form for Storage Capacity is referred to in Appendix 9

3.10. The Application Form for Tanker Filling Slots is given in Appendix 10.

4. Quantities Available and Tender Details

4.1. In accordance with Uniform Network Code Section Z3.1.2, National Grid LNG Storage has elected to invite applications for Storage Capacity by way of a three stage tender process, on the basis of price, for allocation under Uniform Network Code Section Z3.5.

4.2. Applicants may tender a price for a number of "units of bundled capacity" in either or all tender stages.

4.3. For each tender stage, the number of units of bundled capacity, the duration, injection rate and the relevant reserve price are as indicated in Appendix 1.

4.4. For Applicants applying for Tanker Filling Slots, there are 12 Tanker Filling Slots available at Avonmouth and these are allocated as laid out in paragraph 6.4.

5. Applications

Completion of Application Form(s)

5.1. For each tender stage, Applicants must submit a separate application on the Application Form(s) using the electronic application form, which can be found at http://www2.nationalgrid.com/UK/Services/LNG-Storage/Capacity-Auctions/. Additionally, immediately following the relevant National Grid LNG Invitation Close Date, Applicants will be requested to submit the Application Forms electronically to National Grid LNG Storage to facilitate the capacity allocation process.

5.2. For each tender stage, the cover sheet must be completed, and the separate pages should be completed as appropriate. There is a limit of 25 primary bids that may be made for the facility.

5.3. Where applicants are applying for units of bundled capacity each application must indicate:

a) which tender stage the application relates to;

b) the number of units of bundled capacity which are being applied for;

c) the unit price tendered in pence per bundled unit of Storage Capacity per annum for the primary bid, (which must be stated to not more than four (4) decimal places) equal to or greater than the relevant reserve price; and

d) the attribution of value between Storage Space, Storage Injectability and Storage Deliverability.

5.4. Applicants wishing to apply for Annual Tanker Filling Slots shall submit an application form to National Grid LNG Storage in the form set out in Appendix 10 indicating the number of Annual Tanker Filling Slots applied for.

Submission of Application Form(s)

5.5. Applicants must complete the relevant application forms electronically. Users should then submit completed application forms:

a) By post to the address set out below:

David Mitchell

UK LNG Customer Service and Business Strategy Manager
National Grid Grain LNG
Importation Terminal
Isle of Grain
Rochester
Kent
ME3 0AB

b) or fax FAO: LNG Storage-Commercial Operations on 01634 272197

By no later than 12:00 hours on the relevant National Grid LNG Invitation Close Date and by email to **box.lngstorage@nationalgrid.com**

immediately following the relevant National Grid LNG Invitation Close Date. National Grid LNG Storage accepts no responsibility in respect of lost applications.

For the avoidance of doubt, postal and/or faxed application forms are valid applications and the email is requested to enable an efficient allocation process. Emails without a respective postal and/or faxed application form will not be considered.

5.6. For applications, all Applicants should clearly mark the sealed envelope or fax subject header and subsequent email subject header with their company name.

5.7. National Grid LNG Storage will not be required to consider applications submitted by an Applicant where the requirements of paragraphs 5.1 to 5.6 have not been satisfied.

5.8. An Applicant wishing to withdraw its application must notify National Grid LNG Storage in writing before 12:00 hours on the relevant National Grid LNG Invitation Close Date that it wishes to withdraw. Where an Applicant so notifies National Grid LNG Storage, National Grid LNG Storage will promptly confirm receipt of the Applicant's notification by telephone, withdraw the Applicants sealed envelope from the tender and return it unopened to the Applicant. Following a notification in accordance with this paragraph the Applicant may submit further applications in accordance with this paragraph 5.

Attribution of Value

5.9. The Applicant's weighted average attribution of value shall be applied to the Applicant's accepted tenders and will be used:

a) to determine the Applicable Storage Deliverability Charge Rate for the purposes of Uniform Network Code Section Z6.6.2 ("National Grid LNG Storage Withdrawal Failure");

b) to determine the Applicable Storage Injectability Charge Rate for the purposes of Uniform Network Code Section Z5.7.2 ("National Grid LNG Storage Injection Failure");

c) to determine the Applicable Storage Space Charge Rate for the purposes of Uniform Network Code Section Z5.10.6 ("Storage Injectability Refund"); and

d) to determine the Applicable Storage Space Charge Rate for the purposes of Network Code Section Z7.1.2(a) ("Storage Overrun Charges").

6. Capacity and Annual Tanker Filling Slot Allocation

6.1. As soon as practicable after 12:00 hours on the relevant National Grid LNG Invitation Close Date, National Grid LNG Storage will open all applications and verify that they comply with the provisions of paragraph 5.

6.2. The allocation process for Storage Capacity will be multi-staged. Applications will be provisionally allocated in descending primary bid price order in accordance with Uniform Network Code Section Z3.5.5.

6.3. For the avoidance of doubt:

a) any unallocated capacity from Stage 1 will be rolled forward into Stage 2.

b) any unallocated capacity from Stage 2 will be rolled forward into Stage 3.

c) any unallocated capacity from Stage 3 will be offered in accordance with paragraph 8.

6.4. Where applications made for Annual Tanker Filling Slots exceed in aggregate the number of Annual Tanker Filling Slots available at the Avonmouth National Grid LNG Storage Facility, then National Grid LNG Storage will allocate Annual Tanker Filling Slots to each User in the proportion that the number of Annual Tanker Filling Slots applied for by that User at the Avonmouth National Grid LNG Storage Facility bear to the total number of the Annual Tanker Filling Slots applied for by all Users at the Avonmouth National Grid LNG Storage Facility.

7. Notification

7.1. As soon as reasonably practicable following allocation of Storage Capacity and Tanker Filling Slots pursuant to Stage 1 of the tender process in accordance with paragraph 6, National Grid LNG Storage will deliver a letter to each Applicant (whether successful or not) confirming details of the quantities (if any) of Storage Capacity, and the number (if any) of Tanker Filling Slots, allocated to the Applicant.

7.2. At 10:00 hours on Tuesday 24th March 2015, following the allocation of capacity pursuant to Stage 1 of the tender process, National Grid LNG Storage will publish the following information at http://www2.nationalgrid.com/UK/Services/LNG-Storage/Capacity-Auctions/

a) weighted average price by volume of accepted bids;

b) the volume of capacity to be rolled over to Stage 2 capacity (if applicable); and

c) the number of Tanker Filling Slots to be rolled over to Stage 2 (if applicable).

7.3. As soon as reasonably practicable following allocation of Storage Capacity and Tanker Filling Slots pursuant to Stage 2 of the tender process in accordance with paragraph 6, National Grid LNG Storage will deliver a letter to each Applicant (whether successful or not) confirming details of the quantities (if any) of Storage Capacity, and the number (if any) of Tanker Filling Slots, allocated to the Applicant.

7.4. At 10:00 hours on Thursday 26th March 2015, following the allocation of capacity pursuant to Stage 2 of the tender process, National Grid LNG

Storage will publish the following information at http://www2.nationalgrid.com/UK/Services/LNG-Storage/Capacity-Auctions/

a) weighted average price by volume of accepted bids;

b) the volume of capacity to be rolled over to Stage 3 capacity (if applicable); and

the number of Tanker Filling Slots to be rolled over to Stage 3 (if applicable

7.5. As soon as reasonably practicable following allocation of Storage Capacity and Tanker Filling Slots pursuant to Stage 3 of the tender process in accordance with paragraph 6, National Grid LNG Storage will deliver a letter to each Applicant (whether successful or not) confirming details of the quantities (if any) of Storage Capacity, and the number (if any) of Tanker Filling Slots, allocated to the Applicant.

7.6. At 10:00 hours on Monday 30th March 2015, following the allocation of capacity pursuant to Stage 3 of the tender process, National Grid LNG Storage will publish the following information at http://www2.nationalgrid.com/UK/Services/LNG-Storage/Capacity-Auctions/

a) weighted average price by volume of accepted bids;

b) the volume of unsold capacity Stage 3. (if applicable). Refer to Section 8

c) the number of unsold Tanker Filling Slots (if applicable). Refer to Section 8

7.7. As soon as reasonably practicable following allocation of Storage Capacity and Tanker Filling Slots pursuant to Stage 3 of the tender process in accordance with Paragraph 6, National Grid LNG Storage will deliver a letter to each successful Applicant confirming details of the quantities (if any) of Storage Capacity, and the number (if any) of Tanker Filling Slots, allocated to the Applicant in both Stage 1,Stage 2 and Stage 3.

8. Residual sales of unallocated Units of bundled capacity

8.1. Any units of bundled capacity remaining unallocated after the Stage 3 tender process may be purchased from 10:00 hours on Wednesday 01st April 2015 under late-booking arrangements (Uniform Network Code Section Z3.7) for the remainder of the relevant Storage Year.

8.2. The late-booking charge rate (for the purposes of Uniform Network Code Section Z3.7.7) for a unit of bundled capacity at Avonmouth, will be the weighted average price of the top 50% by volume of accepted bids over all Stages for that facility plus 0.1 pence per unit of bundled capacity. Capacity will be allocated on a first come, first served basis.

8.3. Should any units of bundled capacity remain unallocated after Stage 3, the late-booking charge rates will be announced no later than 10:00 hours on Wednesday 1st April 2015.

Appendices

1. Indicative Quantities Available and Reserve Prices (Stage 1 and Stage 2)
2. Storage Injection and Withdrawal charges and Tanker Filling Charges
3. Carry Over Charges for Uncovered Gas in Store
4. Planned Maintenance Outages
5. Maximum Storage Capacity
6. Withdrawal Standby States, Lead Times, Standby Conditions and Charges
7. Monthly Injection Overrun Cap and Permitted Deliverability Overrun Charges
8. Constrained Storage Statement
9. Storage Capacity Application Form
10. Tanker Filling Slots Application Form

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Appendix 1

INDICATIVE QUANTITIES AVAILABLE AND RESERVE PRICES

.

Facility	2015/16 Constrained Status	Bundled Units Available						Reserve Price (pence per bundled unit)
Avonmouth	Not Constrained	**Stage 1**: (12 month fixed Storage Duration)	134,000,000	kWh	Injectability:	0.0041	kWh/d	Stage 1: 0.4203
					Space:	1	kWh	
		Stage 2: (6 month fixed Storage Duration) (plus any rolled over capacity)	67,000,000	kWh				Stage 2: 0.4203
					Deliverability:	0.5597	kWh/d	
					Duration:	1.79	Days	Stage 3: 0.4203
		Stage 3: (6 month fixed Storage Duration) (plus any rolled over capacity)	67,000,000	kWh				
		Total	**268,000,000**	**kWh**				

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Appendix 2

STORAGE INJECTION AND WITHDRAWAL CHARGES

Storage	**Storage Injection** (During Injection Period[1]) (p/kWh)	**Storage Injection** (Outside Injection Period) (p/kWh)	**Withdrawal** (p/kWh)
Avonmouth	0.467	0.506	0.035

TANKER FILLING CHARGES

Annual Tanker Filling Slot	£9,619.03	per annum
Storage Withdrawal	£699.57	per tanker load

[1] As defined in Paragraph 2.3 of this document

Appendix 3

CARRY-OVER CHARGES FOR UNCOVERED GAS IN STORE 2015

Carry-over Month	**Charge** (p/kWh/day)
May	0
June	0.00021
July	0.00063
August	0.00127
September	0.00506
October	(mandatory withdrawals apply)

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Appendix 4

PLANNED MAINTENANCE – 1ST MAY 2015 TO 30TH APRIL 2016

Withdrawal Outages

SITE	DATES (inclusive)	AVAILABILITY
Avonmouth	01st July 2015 – 31st October 2015	0%

Injection Outages

SITE	DATES (inclusive)	AVAILABILITY
Avonmouth	01st November 2015 – 30th April 2016	0%

Tanker Bay Outages

SITE	DATES (inclusive)	AVAILABILITY
Avonmouth	29th June - 03rd July 2015	0%

Appendix 5

INDICATIVE VALUES FOR MAXIMUM STORAGE INJECTABILITY, MAXIMUM STORAGE SPACE AND MAXIMUM STORAGE DELIVERABILITY FOR 2015/16

Table 5

Facility	Storage Injectability (kWh/d)	Storage Space (kWh)	Storage Deliverability (kWh/d)
Avonmouth	1,103,260	268,000,000	150,000,000

Appendix 6

WITHDRAWAL STANDBY STATES, LEAD TIMES, STANDBY CONDITIONS AND CHARGES

Site	State	Withdrawal lead time	Cost per day
Avonmouth	1	1 hr	n/a
	2	2 hrs	£4,219.31
	Normal	6 hrs	£0
Standby Conditions: a) system demand is greater than 80% of estimated peak demand, or b) "bid to buy prices" for the Day are equal to the average summer gas price plus the injection commodity price plus the clearing price for the facility minus 0.1 p/kWh and at other times at the discretion of National Grid LNG Storage			

Notes

State 1: Typically when the site is withdrawing gas

State 2: When site is at a shortened withdrawal lead-time, but not exporting gas

Normal: Where site is not at a state ready for withdrawing gas

For the avoidance of doubt a User will not be able to request that a particular facility be moved to a lead time of 1 hour ("State 1") as a facility will only move to that state when it is already flowing.

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Appendix 7

MONTHLY INJECTION OVERRUN CAP

Months in 2015/16 Storage Year	Charge (p/kWh)
May	0.00000
June	0.01055
July	0.01793
August	0.01055
September	0.01055
October to April	0.00000

PERMITTED DELIVERABILITY OVERRUN CHARGES

Months in 2015/16 Storage Year	Charge (p/kWh)
June, July, August, September	0.09230
April, May, October, November	0.19251
December, January, February, March	0.38501

Appendix 8

Constrained Storage Statement 2015/2016

This Statement is published in accordance with Section R of the Uniform Network Code.

Constrained Storage Facilities

Constrained Storage Facilities are situated on the parts of the NTS most remote from the NTS Supplies. On days of high demand, some of the gas required at the extremity of the network may come from the local Storage Facility. This means that pipelines feeding that locality do not have to provide gas for the full demand on a peak day. Gas from the local storage facility can be used to meet peak day demand instead of investing in new pipelines. The use of storage to save on pipeline investment is known as transmission support.

At present the LNG Storage Facility at Avonmouth is a Constrained Storage Facility. Users who book the Constrained LNG storage service from National Grid LNG Storage at this facility agree to provide transmission support gas to National Grid on days of very high demand. They also agree to retain a minimum inventory level of gas in store so that transmission support gas is available all winter.

For the 2015/2016 Storage Year, National Grid does not require a minimum inventory to be maintained at the Avonmouth facility.

Minimum Inventory Percentages (Unified Network Code Section R)

For each week in the Winter Period, a User's gas-in-storage in each Constrained Storage Facility shall not be less than the percentage of the User's Available Storage Space. These percentages are calculated from the constrained volumes required and the Storage Space available after allowing for Operating Margins requirements. As National Grid does not require a minimum inventory to be maintained for 2015/2016, the percentage is zero as indicated below.

Operating Margins Gas Requirement* 196.0 GWh			
Week commencing 6.00am on:	Avonmouth	Week commencing 6.00am on:	Avonmouth
05-Oct-15	0%	04-Jan-16	0%
12-Oct-15	0%	11-Jan-16	0%
19-Oct-15	0%	18-Jan-16	0%
26-Oct-15	0%	25-Jan-16	0%
02-Nov-15	0%	01-Feb-16	0%
09-Nov-15	0%	08-Feb-16	0%
16-Nov-15	0%	15-Feb-16	0%
23-Nov-15	0%	22-Feb-16	0%
30-Nov-15	0%	29-Feb-16	0%
07-Dec-15	0%	07-Mar-16	0%
14-Dec-15	0%	14-Mar-16	0%
21-Dec-15	0%	21-Mar-16	0%
28-Dec-15	0%	28-Mar-16	0%

*The Avonmouth OM booking is currently indicative, subject to execution of the UNC pre-emption rights

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Threshold Demand Flow

National Grid may make Constrained Storage re-nominations in respect of a Constrained Storage Facility (in accordance with Section R of the Uniform Network Code), in respect of any day when the forecast flow at the relevant Constrained Points exceeds the Constrained Threshold Demand Flow. As National Grid does not require a minimum inventory to be maintained for 2015/2016, the demand flow is not applicable, as indicated below.

Constrained Threshold Demand Flow		
Facility	Constrained Points	Flow (mcm\d)
Avonmouth	Flow through Aylesbury Compressor Station	N/A
Avonmouth	Net Demand in the South West Quadrant (as defined below*)	N/A

* Net Demand in the South West Quadrant is defined as the demand at offtakes on the NTS south of Wormington Compressor along feeders 14 and 20, and south of Aylesbury compressor along feeder 7, less any flows from supply points in the same area.

Transportation Credit

In recognition of the transmission support obligations, Users who book the Constrained LNG storage service receive a transportation credit from National Grid; this reflects the saved investment in the pipeline system. The transportation credit is subtracted from the price of deliverability for the storage service. Details of transportation credits are given in the National Grid Gas Transportation Charging Statement. The current credit, applicable from 1st May 2015, has been calculated in accordance with UNC TPD Section Y and is reproduced below. The price reflects the fact that National Grid does not require a minimum inventory to be maintained for 2015/2016.

Facility	Credit Rate based on Capacity (pence per peak day kWh per day)	Credit Rate based on Annual Shipper Storage Space Volume (p/kWh)
Avonmouth	0.0000	0.0000
NB. The total CLNG credit payable is independent of the OM space booked at Avonmouth.		

I hereby APPROVE this statement

Signed: Craig Dyke

Gas Network

Development Manager Date:

25/02/2015

Appendix 9
2015/16 STORAGE CAPACITY APPLICATION FORM

See electronic bid sheet at:

http://www2.nationalgrid.com/UK/Services/LNG-Storage/Capacity-Auctions/

Appendix 10

2015/16 TANKER FILLING SLOTS APPLICATION FORM

To National Grid LNG Storage

1. Name, address and registration number of applying company:

("the Applicant")

2. Applicant's Contact Details

Name and Position Held:
Address (if different from Company address):

Telephone Number:
Fax Number:

3. Application

The Applicant wishes to Purchase and Use Storage Services for Natural Gas from National Grid LNG Storage as specified in the attached Application Form (or such smaller quantities as may be allocated under the terms of the Uniform Network Code and the 2015 Annual Storage Invitation)

4. Validity of Application

The Applicant hereby applies for Storage Services from National Grid LNG Storage, which application may not be withdrawn after the National Grid LNG Invitation Close Date. As soon as reasonably practicable after the National Grid LNG Invitation Close Date, National Grid LNG Storage will confirm to the Applicant the allocation of Storage Capacity. By applying for the Storage Services, the Applicant agrees to accept the provisions governing operation of Storage Services contained in the Uniform Network Code and the 2015 Annual Storage Invitation. "2015 Annual Storage Invitation" means National Grid LNG Storage's letter and enclosures dated 27th February 2015.

Signed on behalf of the Applicant _____

Position _____

Date _____

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2015/16 **TANKER FILLING SLOTS APPLICATION FORM**

FACILITY – AVONMOUTH

NAME OF APPLICANT

_____

Non- Price Invitation - Application for Tanker Filling Arrangements

Annual Tanker Filling Slots Number Applied for at £9,619.06 (please tick appropriate number)	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	