

National Grid LNG Storage

Invitation to Bid for Special Storage Capacity 2010-11

SPECIAL STORAGE CAPACITY INVITATION

1. Introduction

- 1.1. Pursuant to Section Z3.8 of the Uniform Network Code (the "Network Code"), National Grid LNG Storage, a trading division of National Grid Gas plc with responsibility for LNG Storage operations, invites further applications for Storage Capacity (separate from the standard Storage Capacity offered in the recent 2010/11 LNG Annual Storage Invitation) (such Storage Capacity being referred to herein as "Special Storage Capacity") at the National Grid LNG Storage Facility at Avonmouth (the "Avonmouth LNG Facility") for the remainder of the 2010/11 Storage Year in accordance with the provisions of the Network Code and this Special Storage Capacity Invitation.
- 1.2. Anyone wishing to apply for Special Storage Capacity ("Applicants") must return their completed application forms to National Grid LNG Storage by 12.00 hours on Friday 22nd October 2010 or such later date as may be notified in accordance with 1.3 (the "Special Storage Capacity Invitation Close Date").
- 1.3. National Grid LNG Storage reserves the right to extend the Special Storage Capacity Invitation Close Date, provided that any notice to extend shall be given at least 1 week prior to the previously notified Special Storage Capacity Invitation Close Date.
- 1.4. Terms not defined in this Special Storage Capacity Invitation have the meanings given to them in the Network Code.
- 1.5. The provisions of Section Z of the Network Code (except as amended by this Special Storage Capacity Invitation) shall apply to the Special Storage Capacity. In the event of any conflict between the terms of this Special Storage Capacity Invitation and the terms of Section Z of the Network Code, the terms of this Special Storage Capacity Invitation shall apply in respect of the Special Storage Capacity.

2. Service Available

- 2.1. Any Special Storage Capacity allocated pursuant to this Special Storage Capacity Invitation will be for the period 06:00 on 1st November 2010 to 05:59 on 1st May 2011.
- 2.2. For the purpose of any Special Storage Capacity allocated pursuant to this Special Storage Capacity Invitation, the National Grid LNG Injection Period will be from 06:00 1st November until 05:59 on 15th December 2010. Notwithstanding this extension to the Injection

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Period, the Storage Injection Charge outside of the injection period stated in Appendix 1 shall apply during the extension to the Injection Period. For the avoidance of doubt, the National Grid LNG Injection Period shall not be modified for holders of Standard Storage Capacity.

- 2.3. The maximum amount of Special Storage Capacity available is as follows:

| Facility | Bundled Units Available (kWh) | | | Reserve Price (pence per bundled unit) |
|-----------|-------------------------------|---|--------|--|
| Avonmouth | 150,000,000 | <i>Each Bundled Unit consisting of:</i> | | 0.4094 |
| | | Injectability: | 0.0000 | |
| | | Space: | 1.0000 | |
| | | Deliverability: | 0.0000 | |
| | | Duration: | N/A | |

- 2.4. Injection and Deliverability associated with Standard Storage Capacity or Permitted Deliverability Overruns may be used to inject or withdraw gas (as appropriate).

3. Standard Storage Capacity

- 3.1. Except as provided in this Special Storage Capacity Invitation, Special Storage Capacity may be used in association with the standard Storage Capacity at Avonmouth LNG Facility acquired pursuant to the 2010/11 LNG Annual Storage Invitation or any Storage Transfer (such standard Storage Capacity being referred to in this Special Storage Capacity Invitation as "Standard Storage Capacity").
- 3.2. Except as provided in this Special Storage Capacity Invitation, Special Storage Capacity shall carry, and be subject to, the same rights, obligations and restrictions as apply to Standard Storage Capacity.
- 3.3. Notwithstanding the provisions of Section Z4 of the Network Code, a User shall only be entitled to enter into a Storage Transfer in respect of any of the Special Storage Capacity allocated pursuant to this Special Storage Capacity Invitation with the agreement of National Grid LNG Storage (not to be unreasonably withheld). Any such transferred Special Storage Capacity would remain Special Storage Capacity and the terms of this Special Storage Invitation would be applicable to its use and (as a condition of any such transfer being approved) the transferee would be required to agree to be bound by such terms and conditions in relation to the Special Storage Capacity

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as National Grid LNG Storage may reasonably require to give effect to the provisions set out in this Special Storage Capacity Invitation.

4. CALMS

- 4.1. Without prejudice to any of the provisions of paragraph 3 above, Special Storage Space will be recorded on the Customer Access and LNG Management System ("CALMS") as a separate service type from Standard Storage Capacity.
- 4.2. Commercial Operations communications will be via CALMS. A copy of the CALMS manual, which defines training, helpdesk and the transactions carried out, can be requested from National Grid LNG Storage.

5. General Information

- 5.1. Storage Injection and Withdrawal Charges are given in Appendix 1.
- 5.2. Carry Over Charges for Uncovered Gas in Store are given in Appendix 2.
- 5.3. Planned Maintenance Outages are given in Appendix 3.
- 5.4. Withdrawal Standby States, Lead Times, Standby Conditions and Charges are given in Appendix 4.
- 5.5. Monthly Injection Overrun Cap / Permitted Deliverability Overrun Charges is given in Appendix 5.
- 5.6. The Constrained Storage Statement is given in Appendix 6 (however for the avoidance of doubt, National Grid does not require a minimum inventory to be maintained at the Avonmouth facility for the 2010/11 Storage Year).

6. Completion of Application Form(s)

- 6.1. Applicants must submit an application using the electronic Application Form(s), which can be found at www.nationalgrid.com/uk/gas/lngstorage. Additionally, immediately following the Special Storage Capacity Invitation Close Date; Applicants will be requested to submit the Application Form(s) electronically to the email address in paragraph 7.1 to facilitate the capacity allocation process.
- 6.2. National Grid LNG Storage is not obliged to accept all or any applications submitted under this Special Storage Capacity Invitation.

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- 6.3. The cover sheet must be completed, and the separate pages should be completed as appropriate. There is a limit of 25 bids that may be made.
- 6.4. Each application must indicate:
- (a) The number of units of bundled capacity which are being applied for;
 - (b) The unit price tendered, in pence per bundled unit of Special Storage Capacity per annum (which must be stated to not more than four (4) decimal places),

Attribution of Value

- 6.5. For all applications submitted under this Special Storage Capacity Invitation 100% of the value will be deemed to be attributed to Storage Space, and this attribution of value will be used:
- (a) To determine the Applicable Storage Deliverability Charge Rate for that facility 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 that facility 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 that facility for the purposes of Uniform Network Code Section Z5.10.6 (“Storage Injectability Refund”);
 - (d) To determine the Applicable Storage Space Charge Rate for that facility for the purposes of Network Code Section Z7.1.2(a) (“Storage Overrun Charges”);

7. Submission of Application Form(s)

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

- (a) By post to the address set out below:

Matt Golding
Business Development Manager (UK LNG)
National Grid LNG Storage
Floor D3
National Grid House
Warwick Technology Park
Gallows Hill

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Warwick
CV34 6DA

(b) Or by fax FAO: LNG Storage - Commercial Operations on 01926 656587

by no later than 12:00 hours on the relevant National Grid LNG Invitation Close Date and by email to **box.lngstorage@uk.ngrid.com** immediately following the relevant National Grid LNG Invitation Close Date. National Grid LNG Storage accepts no responsibility in respect of lost applications.

- 7.2. 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.
- 7.3. For applications, all Applicants should clearly mark the sealed envelope or fax subject header and subsequent email subject header with their company name.
- 7.4. National Grid LNG Storage will not be required to consider applications submitted by an Applicant where the requirements of this invitation have not been satisfied.
- 7.5. National Grid LNG Storage is not obliged to accept all or any applications submitted under this Special Storage Capacity Invitation.
- 7.6. An Applicant wishing to withdraw its application must notify National Grid LNG Storage in writing before 12:00 hours on the Special Storage Capacity Invitation Close Date that it wishes National Grid LNG Storage to withdraw their application. 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 Applicant's application 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 7.

8. Notification

- 8.1. As soon as reasonably practicable following allocation of Special Storage Capacity, National Grid LNG Storage will deliver a letter to each successful Applicant confirming details of the quantities (if any) of Special Storage Capacity allocated to the Applicant.
- 8.2. At 16.00 hrs on the Special Storage Capacity Invitation Close Date, following the allocation of Special Storage Capacity pursuant to the tender process, National Grid LNG Storage will publish the following

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information at:

<http://www.nationalgrid.com/uk/Gas/Ingstorage/Auctions/>

- (a) The weighted average price by volume of accepted bids
- (b) Percentage of Special Storage Capacity sold

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Appendix 1

Storage Injection and Withdrawal Charges (Avonmouth only)

| | Storage Injection (During Injection Period ¹) (p/kWh) | Storage Injection (Outside Injection Period) (p/kWh) | Storage Withdrawal (p/kWh) |
|-----------|--|---|--|
| Avonmouth | 0.393 | 0.425 | 0.033 |

¹ As defined in Network Code Section Z5.1.1.

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Appendix 2

Carry Over Charges for Uncovered Gas in Store

| Carry-over Month | Charge (p/kWh/day) |
|-----------------------------|-------------------------------|
| May | 0 |
| June | 0.0002 |
| July | 0.0006 |
| August | 0.0012 |
| September | 0.0048 |
| October | (mandatory withdrawals apply) |

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Appendix 3

Planned Maintenance Outages (Avonmouth - for the purposes of this Special Storage Invitation only)

Injection Outages

| Site | Dates (inclusive) | | Availability |
|------------------|--------------------------|------|---------------------|
| Avonmouth | - | to - | - |

Withdrawal Outages

| Site | Dates (inclusive) | | Availability |
|------------------|--------------------------|------|---------------------|
| Avonmouth | - | to - | - |

Tanker Bay Outages

| Site | Dates (inclusive) | | Availability |
|------------------|--------------------------|------|---------------------|
| Avonmouth | - | to - | - |

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Appendix 4

Withdrawal Standby States, Lead Times and Charges (Avonmouth only)

| Site | State | Withdrawal lead time | Cost per day |
|---|--------|----------------------|--------------|
| Avonmouth | 1 | 1 hr | n/a |
| | 2 | 2 hrs | £2000 |
| | Normal | 4 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 each 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 5

Monthly Injection Overrun Cap

| Months in 2010/11 Storage Year | Charge (p/kWh) |
|---------------------------------------|---------------------------|
| May | 0.0000 |
| June | 0.0100 |
| July | 0.0170 |
| August | 0.0100 |
| September | 0.0100 |
| October to April | 0.0000 |

Permitted Deliverability Overrun Charges

| Months in 2010/11 Storage Year | Charge (p/kWh) |
|---------------------------------------|---------------------------|
| June, July, August, September | 0.0875 |
| April, May, October, November | 0.1825 |
| December, January, February, March | 0.3650 |

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Appendix 6

Constrained Storage Statement 2010/2011

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 beach terminals. 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. The required capacity of the pipeline has therefore been reduced and investment saved. 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 these facilities 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 2010/2011 Storage Year, National Grid does not require a minimum inventory to be maintained at the Avonmouth facility. This does not however necessarily indicate a zero requirement into the future.

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 indicated below. These percentages have been calculated from the constrained volumes required and the Storage Space available after allowing for Operating Margins requirements.

| OM Requirement 186.2 GWh | | | |
|----------------------------|-----------|----------------------------|-----------|
| Week commencing 6.00am on: | Avonmouth | Week commencing 6.00am on: | Avonmouth |
| 04-Oct-10 | 0% | 03-Jan-11 | 0% |
| 11-Oct-10 | 0% | 10-Jan-11 | 0% |
| 18-Oct-10 | 0% | 17-Jan-11 | 0% |
| 25-Oct-10 | 0% | 24-Jan-11 | 0% |
| 01-Nov-10 | 0% | 31-Jan-11 | 0% |
| 08-Nov-10 | 0% | 07-Feb-11 | 0% |
| 15-Nov-10 | 0% | 14-Feb-11 | 0% |
| 22-Nov-10 | 0% | 21-Feb-11 | 0% |
| 29-Nov-10 | 0% | 28-Feb-11 | 0% |
| 06-Dec-10 | 0% | 07-Mar-11 | 0% |
| 13-Dec-10 | 0% | 14-Mar-11 | 0% |
| 20-Dec-10 | 0% | 21-Mar-11 | 0% |
| 27-Dec-10 | 0% | 28-Mar-11 | 0% |

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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 Point exceeds the Constrained Threshold Demand Flow indicated below.

| Constrained Threshold Demand Flow | | |
|-----------------------------------|---|------------------|
| Facility | Constrained Point | Flow Rate (mcmd) |
| Avonmouth | Flow through Aylesbury Compressor Station | N/A |

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 Charges document. As National Grid does not require constrained LNG at Avonmouth for the Storage Year 2010/11 the credit rate from 1st May 2010 will be,

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