

Northern Gas Networks
Constraint Management & System Operation

25 April 2016

Constraint Management Services for
Distribution

Annual Report 2016

Northern Gas Networks

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Executive Summary

Northern Gas Networks has been given discretion with regard to the procurement of Constraint Management Services, subject to an obligation under its Gas Distribution Licence to operate the system in an efficient, economic and co-ordinated manner.

Northern Gas Networks confirms that Constraint Management Services during the period 1st April 2015 to 31st March 2016 (covered by this Report) have been procured in accordance with the principles set out in the prevailing Procurement Guidelines, and therefore Northern Gas Networks consider that such activities satisfy its relevant GT Licence obligations.

1. Introduction

1.1 Purpose of the document

This document is the Procurement Guidelines Report ("Report"), which Northern Gas Networks is required to publish in accordance with Special Condition D5 of the Gas Distribution Licence. This Report provides information in respect of the procurement of Constraint Management Services referred to in the Procurement Guidelines. The Procurement Guidelines set out the kinds of Constraint Management Services which Northern Gas Networks may be interested in purchasing, together with the mechanisms by which Northern Gas Networks envisages purchasing such services.

This Report covers each of the services detailed in the Tables 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 Northern Gas Networks' GT Licence and the Uniform Network Code, as the case may be.

This report can be viewed and downloaded from our website www.northerngasnetworks.co.uk.

Further copies of this report may be obtained from:

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1.2 Reporting Period

This Report has been prepared in accordance with paragraph 4 Standard Special Condition D5. This Condition states that 'Before 1 May of each formula year the licensee shall prepare a report in a form approved by the Authority in respect of the constraint management services which the licensee has bought or acquired in the previous formula year (or such longer period as the Authority may approve or require)'.

This report includes details of Constraint Management Services procured in relation to the gas flow period 1 April 2015 to 31 March 2016 inclusive, covering both North and North East LDZs which form Northern Gas Networks.

2. Procurement of Constraint Management Services

2.1 Definition of Constraint Management Services

Constraint Management Services are those services that Northern Gas Networks needs to procure in order to operate its Distribution pipeline system in an efficient, economic and co-ordinated manner.

Such services may be provided from a variety of sources. Northern Gas Networks may access existing mechanisms or markets, for example via a trading system or alternatively it may be via other contractual frameworks.

The Procurement Guidelines summarises the above Constraint Management Services as being required for the following application:-

- DN Exit Capacity Management
- Storage
- Interruption.

2.2 Constraint Management Services Procured

The services Northern Gas Networks procured in this period are summarised in the following Tables.

Table 1 – DN Exit Capacity Management

Service Component Description

In order to manage demands in the distribution network Northern Gas Networks procures flow capability through NTS Offtakes. The flow, based on capability is managed through a flat capacity requirement (peak daily flow) and a flex capacity requirement (flow between 06:00 and 22:00 relative to end of day flow).

Component Details

**Procured Flat & Flex Capacity– Northern Gas Networks.
1st April 2015 to 30th September 2015.**

(North LDZ and North East LDZ)

LDZ	Flat Capacity (GWh/day)	Flex Capacity (GWh/day)
North	246.81	34.71
North East	275.31	24.88

**Procured Flat & Flex Capacity– Northern Gas Networks.
1st October 2015 to 31st March 2016.**

(North LDZ and North East LDZ)

LDZ	Flat Capacity (GWh/day)	Flex Capacity (GWh/day)
North	239.65	32.90
North East	275.52	25.44

Table 2 – Storage

<p><u>Service Component Description</u></p> <p>Diurnal Storage gas is the quantity of gas required in any given gas day that will balance the input (supply) to match the gas demand at the parts of the day where demand exceeds the supply. Where the perceived diurnal storage requirement for any gas day exceeds that available within the network, Diurnal Storage Services will be procured.</p>
<p style="text-align: center;">Component Details</p> <p style="text-align: center;">1st April 2015 to 31st March 2016 Procured Storage Services</p> <p style="text-align: center;">Northern Gas Networks</p> <p>During the period 1st April 2015 to 31st March 2016 Northern Gas Networks System Control Centre at Moorside in Sunderland has administered the storage required to balance the Network.</p> <p>Northern Gas Networks has made available internal diurnal storage and any additional quantities have been secured by NGN System Control against the flexibility capacities booked with National Grid in the Offtake Capacity Statements.</p>

Table 3 – Interruption

Service Component Description

In the event that demand exceeds transportation capability in either North or North East LDZs, Northern Gas Networks will procure Interruption Services to manage NTS constraints, LDZ constraints and/or supply demand imbalance.

Component Details

During the period 1st April 2015 to 31st March 2016, Northern Gas Networks utilised this service as follows:

LDZ Interruptions				
Month	LDZ	No. of Supply Points Interrupted	No. of Supply Point Days*	Quantity Interrupted (MCM)
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0

On the 1st April 2016 Northern Gas Networks had interruption access to 1 LDZ site with a Maximum Contracted Interruptible SOQ of 85,333 kWh per day.

* Number of Supply Point Days = Number of Supply Points interrupted * duration of interruption for each Supply Point in days.