

Operating Margins Report – August 2015

Introduction

In accordance with Special Condition 8C, this document provides an overview of our procurement activities used to secure our Gas Operating Margins (Gas OM) requirements. The report is split into three separate sections:

- Meeting our 2015/16 OM requirement
- Developments in the OM product and procurement process
- OM Services procured for Gas Storage Year 2015/16

Background

National Grid Gas (NGG) procures capacity and access to a volume of gas for Operating Margins (OM) on an annual basis in line with both the requirements of Section K of the UNC and obligations detailed in the National Grid Gas Safety Case.

The Gas OM Service is the delivery of a rate of change of gas flow to or off-take from the National Transmission System (NTS) to manage, in operational timescales, sudden changes in supply or demand that cannot be met by normal trading/balancing arrangements. OM allows time for National Grid Gas to reconfigure the NTS or for the market to deliver additional supply and protects against the need to declare emergency conditions so that normal commercial market operation can be maintained where possible.

Gas Operating Margins is procured via a variety of contracts with several gas industry participants around the UK NTS including: capacity holders at storage facilities; large scale demand side users and LNG importation and storage facilities.

A minimum of two competitive market tenders are run each year:

- Tender to procure capacity or delivery rights
- Re-profiling Tender (or more as necessary) to buy and sell the physical gas to inject and withdraw from storage facilities to match the location of the procured capacity.

Further information on Gas Operating Margins can be found on the Gas OM pages of the National Grid website via the below link:

<http://www.nationalgrid.com/uk/Gas/OperationalInfo/GasOperatingMargins/>

Meeting our OM Requirement

Every year that we undertake an OM procurement tender round we strive to optimise the OM requirement (tender quantity and products) and maximise tender participation from a diverse range of commercial entities. In achieving this we are continually looking to reduce the barriers to market entry and enhance the awareness of the OM opportunities to the industry.

The OM Requirements Calculation Methodology

The OM Requirement exists to meet UNC and NGG Safety Case compliance obligations. The philosophy behind this year's methodology is consistent with that used last year and is explained in the published **2015-16 Operating Margins Statement**.

Introduction of a 3 Year OM Tender

Under the RIIO-T1 regime all costs incurred for the procurement and utilisation of OM are a pass through element within the licence. NGG aims to reduce the costs for customers whilst meeting the OM requirements for each year. Ofgem have placed a reputational scheme on NGG to promote competition in the procurement of OM services for our customers.

Recognising this and the strategic nature of OM, NGG has this year asked the market to tender for OM services up to a 3 year time horizon. To further encourage participation, OM service providers have also been offered the flexibility to choose to link tenders across years.

Historically, NGG has met the OM volume requirement through a portfolio of market tendered, long term (with annual option) and regulated service contracts.

The key drivers behind this initiative were:

- To work with service providers to improve our resilience to the observed downward trend in the extent of offered OM services in recent years.
- To stimulate the market for the provision of a longer term OM service (opening the potential for strategic placement of longer term OM bookings at key sites and to reduce annual reprofiling costs).
- From a risk and cost management perspective, to facilitate the optimisation and utilisation from the portfolio available to us, i.e. optionality available to us under a long term contract and the portfolio of tendered volumes.

For each of the gas storage years 16/17 and 17/18, tenders totalling 1,263 GWh were received from 6 providers. Of these, 2 tenders were accepted (for each of the years) from 2 providers (a Primary Capacity Holder of LNG Importation with Storage provider and a Supply and / or Demand side portfolio provider).

Communications strategy

To maximise participation in the OM tender round each year, we use multiple channels to engage and educate the community about the potential opportunities to provide a commercial service to ourselves as the System Operator. This continued engagement is vital to both maintain existing OM providers and to work with potential new entrants into the market place.

Building on previous engagement strategies, a structured approach to highlight our procurement requirements was further supported, where necessary, with ad hoc conversations to give enhanced clarity to potential service providers. These were tailored to the requirements of individual parties and their level of knowledge and understanding of the tender process.

Developments in the OM product and procurement process

Lessons Learnt

As part of the continuing evolution of our OM procurement activities we routinely review any lessons learnt from each tender round. Below is a summary of the learning points from the Gas OM procurement that we expect to incorporate into future development of the OM tendering and contracting processes over the longer term.

We need to work closer with and further listen to potential service providers to understand the challenges of physical service delivery, commercial considerations and procurement process blockers.

In particular, we note:

- OM provision is complex and further work is required to develop customer - facing materials that relate to service characteristics and tender timescales.
- The complexity of wider UK/EU legislation can deter market engagement in OM service provision and potential providers balance this against other commercial opportunities.
- Easier contract terms and a simplified contracting process could reduce barriers to entry for OM providers.
- There remains some variation in contract terms (e.g. call off). Further contract harmonisation is required to optimise the tender evaluation process, and to minimise operational risks.

Utilising the lessons learnt and speaking to internal and external stakeholders, a number of initiatives are currently being reviewed to improve the end-to-end OM process. These are primarily based around further development of the OM requirement assessment methodology and the contracting process. These are outlined in greater detail below.

Developing the OM Requirements Calculation Methodology

Our OM Requirements Methodology remains under ongoing review as the environment in which we operate continues to evolve, and this will ensure that we continue to further refine our definition of the requirements on the network going forwards. We undertake a full annual review of the OM requirement based on the very latest supply and demand forecasts and operating experience. From a contestability perspective, this will allow National Grid to identify geographical areas where the OM provision could be reinforced and this will help to identify focus areas for potential suppliers of OM services.

Providers of Interest

To complement the broad communications strategy, we have targeted and will continue to target certain providers as being a priority to engage with. This will either be because they have commissioned a new site, expressed an interest in providing OM, tendered in previous years or have been identified as being strategically advantageous to fulfilling the OM requirement.

Engagement over previous years has demonstrated that for some potential providers it may take longer for them to become comfortable with the OM contract terms. In such instances we have continued to focus account management time to help facilitate receiving bids from these sites.

Reducing Barriers to Entry

We procure OM to adhere to our safety case and the associated requirements are based around minimum response times, volumes and availability criteria. While these requirements provide considerable restrictions on the potential market size, we continue to look to simplify processes and reduce barriers to entry.

We continue to work on a number of areas of focus that are designed to identify where we can reduce the complexity of the contracting process. The key components of this work are based around the standardisation of contract terms, reducing contracting timescales and exploring the potential of developing a framework agreement approach.

OM Services Procured for Gas Storage Year 2015/16

OM Requirement

The level and geographical distribution of OM services determines the effectiveness of OM gas to balance the NTS in an OM event.

The Initial OM Requirements for 15/16 storage year totalled 1,021 GWh ahead of the tender. This assumed a NTS network solution including a distribution of OM services as typically offered in recent years. However, the profile of offers received did not balance the Initial Requirement.

Based on the tenders received, an alternative compliant network solution was calculated leading to a Revised OM Requirement totalling 1,170 GWh which could be met by the OM offers available. In the Revised Requirement a greater reliance on OM gas from southerly-located services increased both the Supply Loss and Orderly Rundown requirements and, based on the offers available, the required use of the Avonmouth regulated services.

The table below summarises this position by Operating Margins Requirement Type.

Operating Margins Requirement Type	2015/16 Initial OM Requirements (GWh)	2015/16 Revised OM Requirements (GWh)	2015/16 OM Bookings from Tender Process (GWh)*
Supply Loss	425	477	272
Locational - West	95	95	11
Locational - South	38	38	0
Locational - North	0	0	0
Locational – Scotland	0	0	0
Locational - Wales	0	0	0
Non-Locational	70	70	70
Orderly Rundown	393	490	490
Total	1,021	1,170	843

* Excludes Long Term Contract and Non-Regulated service bookings.

The 1,170 GWh booking for 2015/16 was made at a cost of £21.7m.

Tendered Volumes

Tendered volumes of 2,949 GWh (1,875 GWh excluding site duplicates) were available for OM services for 2015/16. This compares to 5,341 GWh (1,962 GWh excluding site duplicates) for last year. The lower tendered volumes are primarily attributable to lower tender volumes from storage sites.

Prices and Acceptances

The criteria for acceptance are broader than cost minimisation and factor in physical capability and effectiveness in providing the particular OM service required and achieving a geographical diversity of supply.

The table below summarises key price metrics on market tenders received and accepted for the 2015/16 gas storage year.

Arrangement Type	Offer Details	Tender Offered Prices (p/kWh)	Tender Accepted Prices (p/kWh)	Portfolio Accepted Prices (p/kWh)**
Capacity Arrangements	Weighted Average Offer Price per unit of space (p/kWh)	0.53	0.55	1.36
	Minimum Offer Price per unit of space (p/kWh)	0.14	0.14	0.14
	Maximum Offer Price per unit of space (p/kWh)	3.24	2.66	4.09
Gas Delivery Arrangements	Weighted Average Offer Price per unit of deliverability (p/kWh/day)	2.32	2.09	***
	Minimum Offer Price per Unit of deliverability (p/kWh/day)	1.77	1.77	***
	Maximum Offer Price per Unit of deliverability (p/kWh/day)	6.14	6.14	***

** Includes all OM bookings (i.e. from Tendered, Long Term and Non-Regulated).

*** Redacted to prevent disclosure of commercially sensitive information.

Tender Participation

For 15/16, 15 tenders were received from 11 unique participants. Chart 1 below shows how this level of participation compares to previous years. Chart 2 shows how the 15 tender offers received were split between Capacity and Delivery arrangements.

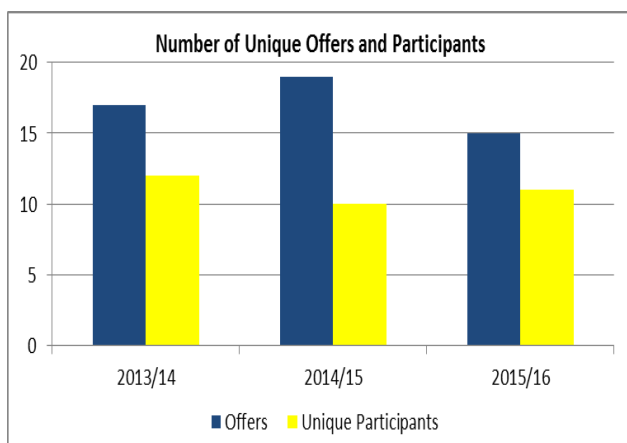


Chart 1

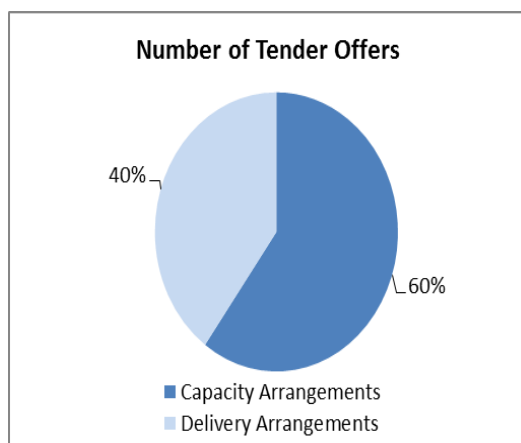


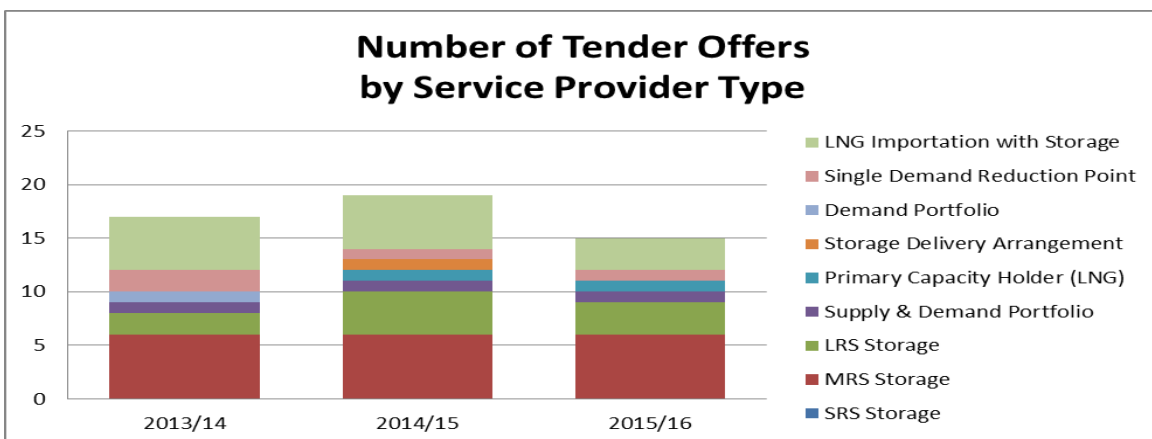
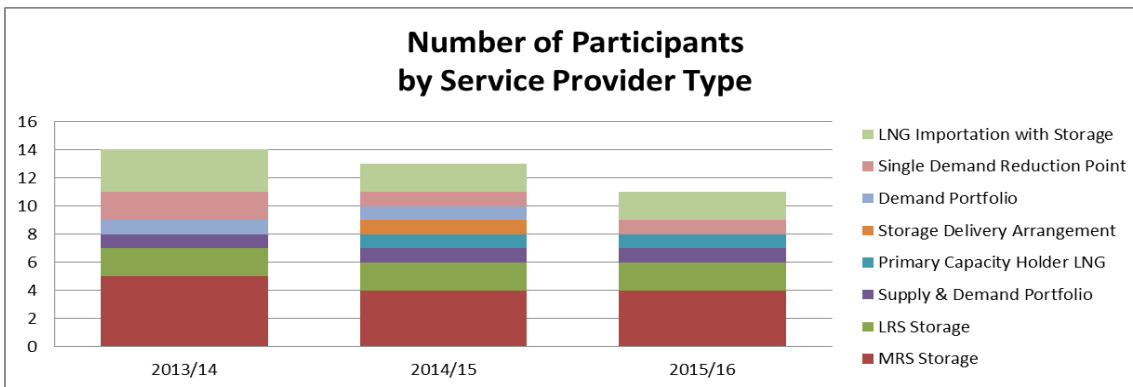
Chart 2

Whilst 11 unique participants have been highlighted in Chart 1, a number of potential providers submitted more than one offer across the various provider types.

For the purposes of showing the number of participants by provider type, it has been necessary to include individual participants in more than one category in the table below.

Provision Type	Number of Participants	Number of Tender Offers
LRS Storage Facilities	2	3
MRS Storage Facilities	4	6
SRS Storage Facilities	0	0
Capacity Total	6	9
Supply and / or Demand Portfolio	1	1
Primary Capacity Holder LNG	1	1
Storage Delivery Arrangement	0	0
Demand Portfolio	0	0
Single Demand Reduction Point	1	1
LNG Importation with Storage	2	3
Delivery Total	5	6
All Tender Total	11	15

The charts below provide a historical perspective on levels of participation.



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