

**Consultation
Document 3**

**Operating Margins:
Contestability Update
& Incentives**

**National Grid Gas (NTS)
System Operator
Incentives
for 1 April 2010**

Version 1.0

Issued 14th September 2009

Responses requested by 2nd October 2009

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Executive Summary

At Ofgem's request National Grid has led on the development and consultation on Initial Proposals for System Operator (SO) Incentives for the last two years. Through an open letter issued on the 28 May 2009, Ofgem has again asked National Grid to lead on the consultation of Initial Proposals for SO Incentives (commencing April 2010). Responses to this consultation document will be used to inform the development of the Initial Proposals.

This document explores the requirement for Operating Margins, the market in Operating Margins services, its procurement and the reintroduction of comprehensive incentivisation in this area.

This consultation is also being used to update the industry on the Operating Margins Contestability work that is aiming to promote and facilitate competition in the provision of Operating Margins Services.

Two further consultations have also been published this summer covering Environmental Incentives and Other SO incentives including the potential for a new maintenance incentive.

**Responses to the consultation should be sent to
soincentives@uk.ngrid.com**

by 5pm on 2nd October 2009

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Section 1 Introduction

This section provides an overview of the process being followed for the development of SO Incentives commencing 1 April 2010 and puts this consultation document into a wider context.

Background

1. National Grid Gas operates the high pressure Gas Transmission System in Great Britain. This System Operation (SO) function is subject to a number of financial incentive arrangements which encourage us to minimise the overall cost of system operation to consumers, to consider environmental impacts and to support the efficient operation of the wholesale gas market. A number of these incentives expire at the end of March 2010 and therefore need to be reviewed.
2. These incentives are designed to deliver benefits to the industry and consumers. These include direct financial benefit from reductions in the costs associated with operating the gas transmission network and other benefits from meeting key performance measures (such as through improved information provision to the market).
3. The various incentive schemes provide a focus on key areas where National Grid is able to create value for the industry and consumers, allowing National Grid to retain a share of any value created (or to be penalised should targets not be met).
4. National Grid has led the last two consultation processes¹ on the development of initial proposals for Gas SO Incentives. The earlier start to last year's consultation enabled a fundamental review of the incentives to take place and resulted in 3 year incentives being set for Shrinkage and Unaccounted for Gas (UAG) with a number of other incentives being set for one year.
5. Via an open letter, published on 28 May 2009², Ofgem has asked National Grid to lead on the development of initial proposals for SO incentives commencing April 2010. The letter summarises Ofgem's views on the objectives, process and timetable for this year's process and topics for this year's consultation. National Grid's response to this letter can be found on the National Grid Website³.

¹ For Incentives commencing 1 April 2008 and 1 April 2009.

² <http://www.ofgem.gov.uk/Markets/WhlMkts/EffSystemOps/SystOpIncent/Documents1/Open%20Letter%20final.pdf>

³ <http://www.nationalgrid.com/uk/Gas/soincentives/docs/>

6. This consultation process is also being used to update the industry on the Operating Margins Contestability work that is aiming to promote competition in the provision of the Operating Margins services. Further information on the Operating Margins Contestability project is covered within this document.

Consultation Process

7. In its letter, Ofgem recognises the valuable contribution made by the industry in developing the incentive schemes from April 2009 and goes on to state that it is keen to further promote engagement from industry participants, end customers and smaller gas suppliers in this year's process. In response to this, National Grid has presented at a number of industry meetings and arranged bilateral discussions with interested parties to highlight the issues for this year's consultation. A copy of the slides used at these meetings can be found on our website.⁴
8. If you would like National Grid to present at any future meeting or would like to meet on a one to one basis to discuss this year's consultation, then please contact us using the contact details in section 8 of this document.
9. This is the third and final consultation document that National Grid has published this summer. The focus of each of these independent documents is summarised below.

Document	Topics	Issued	Closing Date
1	Residual Balancing, Demand Forecasting, Maintenance, Data Publication, System Flexibility, CV Shrinkage, Information on Incentives, bundled vs unbundled schemes	31/07/09	28/08/09
2	Environmental Incentives	26/08/09	23/09/09
3	Operating Margins: Contestability Update & Incentives	14/09/09	02/10/09

10. The consultation documents do not contain detailed proposals for SO Incentives schemes to apply from 1 April 2010. They are intended to invite industry views on a range of issues that might drive the form and structure of incentives schemes. A description of each of the current SO incentive schemes is available in the Appendix 1 of the first consultation document⁵
11. The responses to the three consultation documents, along with the feedback provided at the industry and bilateral meetings will be used to aid our understanding of the industry's view of the behaviours that would promote the efficient operation of the market, and help align incentives with the value

⁴ <http://www.nationalgrid.com/NR/rdonlyres/A6C7562E-3E58-4378-942D-DE0B87D1C776/35977/SOIncentivedevelopmentpresentation.pdf>

⁵ <http://www.nationalgrid.com/NR/rdonlyres/21448D66-90F7-4EC2-A958-E22882FE94B8/36072/GasSOIncentivesConsultationDocument1.pdf>

adding activities that National Grid undertakes. This information will feed into our development of Initial Proposals for incentives to apply from April 2010. Our aim is to issue an SO Incentives Initial Proposals consultation document in late October, with a consultation period closing by mid December.

12. During the consultation period, National Grid will host an industry event where the Initial Proposals will be presented and questions on the proposals will be invited.
13. Following industry feedback on last year's process, in its letter of 28 May, Ofgem has indicated that it will come forward with initial comments during the consultation on Initial Proposals.
14. On conclusion of the Initial Proposals consultation, National Grid will issue a consultation report incorporating the responses received from interested parties which will be published on our website. The report and all responses will be sent in full to Ofgem. In early 2010, Ofgem will develop and consult on its Final Proposals for SO Incentive schemes.

SO Incentive Review Timescale	
June - July 2009	Initial industry consultation/ engagement
July - September 2009	Publication of consultation documents
October 2009	Publication of initial proposals
November 2009	Industry event
November 2009	Ofgem to provide initial comments
December 2009	Initial Proposals consultation period closes and consultation report issued
Early 2010	Ofgem consultation on final proposals
April 2010	Scheme go live

15. Throughout the process, the SO Incentives area of the National Grid website will be kept updated with all relevant documents. A link to this part of our website is included in the contact details in Section 8 of this document. National Grid can be contacted using these contact details to discuss any aspects of SO Incentives.
16. Responses to this consultation will be published on National Grid's website and are requested by 2nd October 2009.

Structure of this Document

17. This consultation document aims to inform industry on the progress in developing the procurement of Operating Margins and invites industry views on the procurement of Operating Margins and associated incentives. The remainder of the document is structured as follows:

- Section 2 sets out the requirement for Operating Margins.
- Section 3 discusses the progress on the Operating Margins Contestability work.
- Section 4 discusses the market in Operating Margins services.
- Section 5 describes the potential procurement process for Operating Margins services for 2010 onwards.
- Section 6 describes the current Operating Margins incentive and asks whether an 'Availability' Incentive can be reintroduced.
- Section 7 provides a summary of the consultation questions.
- Section 8 provides our contact details for any party that wishes to contact us to discuss any aspect of this consultation.
- Appendix 1 discusses the testing of Operating Margins services from potential providers.

Section 2 Operating Margins Requirement

This section summarises the need for Operating Margins Gas and the types of Operating Margins Requirement.

2.1 Operating Margins Overview

18. Operating Margins (OM) gas is used to maintain National Transmission System (NTS) pressures in the immediate period following operational stresses and before market balancing measures become effective. Such stresses may result from supply failure, unanticipated demand changes or failure of an NTS pipeline or associated equipment. Operating Margins is therefore used to protect against the need to declare emergency conditions so that normal commercial market operation can be maintained where possible. A quantity of OM is also procured to manage the Orderly Rundown of the System in the event of a Network Gas Supply Emergency (NGSE) whilst firm load shedding takes place.
19. The obligation to procure Operating Margins (OM) is set out in National Grid Gas's Gas Transporter Safety Case in respect of the NTS (the 'Safety Case') and in the Uniform Network Code (UNC).
20. The Safety Case is prepared by National Grid Gas to demonstrate compliance with the Gas Safety (Management) Regulations 1996 (GS(M)R). The Safety Case considers primarily those matters that relate to management of the safe flow of gas within the network and the provision of an emergency service.
21. National Grid Gas is currently restricted by the safety case, to procuring OM in the form of gas held in storage. Current providers are:
 - Natural Gas Storage Facilities;
 - Liquefied Natural Gas (LNG) Storage Facilities; and
 - Liquefied Natural Gas (LNG) Importation Facilities with Storage.
22. In accordance with the provisions of the UNC, procurement from National Grid Storage LNG Storage Facilities is via pre-emption rights at regulated prices on an annual basis. Procurement of services from other facilities is on commercial terms.

2.2 Operating Margins Requirement

23. There are three categories of Operating Margins Requirement:

- Group 1: Managing pressures and the safety of the system following a beach supply failure or forecast demand change;
- Group 2: Support network pressures in the 24 hours following compressor and/or pipeline failures (which can require OM to be held both within locational zones and nationally) and;
- Group 3: 'Orderly Rundown': Used to effect isolation of Very Large Daily Metered Customers (VLDMCs) and Local Distribution Zone Daily Metered (LDZ DM) loads such that the remaining predominantly domestic demand can be met with supply available at the time.⁶

24. Each of the Operating Margins Requirements will need a volume of gas delivered within 12 to 24 hours. Some of the Group 2 requirement is tied to a specific locational zone – as local network pressures cannot be maintained for sufficient time to transport OM services located further away. The requirement is therefore latterly grouped this way in the document to demonstrate the potential competition by requirement type.

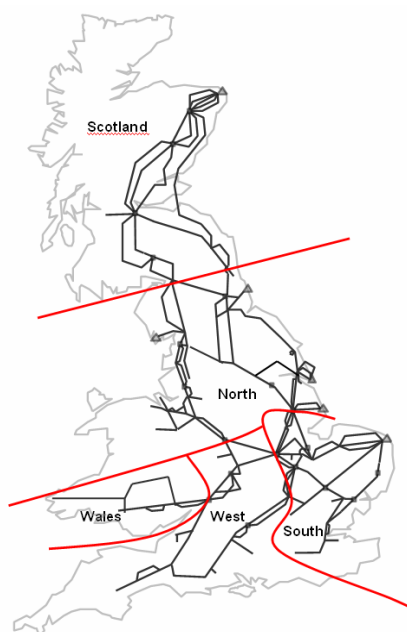


Figure 2.1: Operating Margins Locational Zones

⁶ Assumptions made in the calculation of the Orderly Rundown requirement are published within the Operating Margins Statement: <http://www.gasgovernance.com/NR/rdonlyres/BCE7DA53-B256-49F6-98B7-642B89B07DD6/32344/OperatingMarginsStatement200910.pdf>

25. The OM requirements are calculated using various assumptions including demand and supply levels, isolation profile assumptions as well as information on network topology and local demand levels.⁷
26. The Winter Outlook document published by National Grid⁸ has noted that demand last winter reduced on a weather-corrected basis due to the effects of efficiency measures and recession. For the period to 2010/11, there could be further changes in the demand picture and supply patterns that would lead to a revised assessment of the need for OM. For this period, it is not thought that Exit Reform changes will have any impact on the OM requirement
27. An initial quantitative indication of the 2010 – 2012 OM requirements will form part of the initial proposals document due to be published in October as part of the 2009 SO Review process.

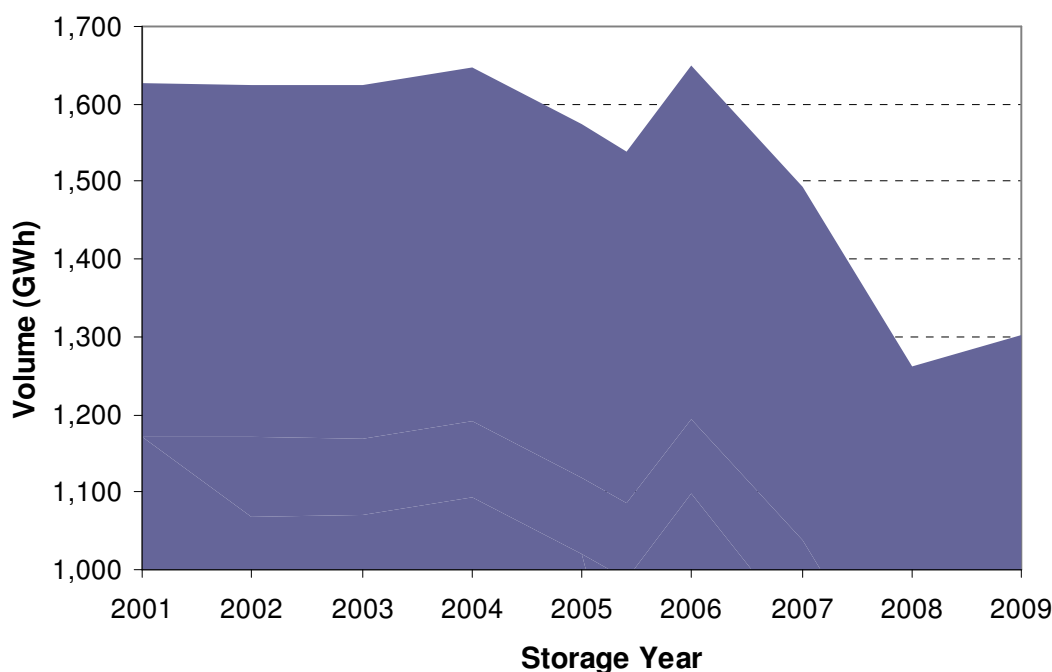


Figure 2.2: Total Operating Margin Requirement 2001-2009

⁷ When assessing OM requirements, National Grid bases its analysis on an assumed order of supply utilisation as described in the Operating Margins statement. Please see the latest OM Statement:

<http://www.gasgovernance.com/NR/rdonlyres/BCE7DA53-B256-49F6-98B7-642B89B07DD6/32344/OperatingMarginsStatement200910.pdf>

⁸ http://www.nationalgrid.com/NR/rdonlyres/4B475A5C-D41A-4039-9089-30B282276577/35406/Winter_Consultation_Report_final_3_.pdf

Section 3 Operating Margins Contestability Update

This section describes the progress to date on enabling a wider range of providers to participate within National Grid's open procurement process for Operating Margins.

3.1 Introduction to Operating Margins Contestability Project

28. Special Condition C25 was introduced into National Grid Gas's Gas Transporter Licence in respect of the NTS at the 2007 Transmission Price Control. This licence condition requires National Grid to use reasonable endeavours to promote competition in the provision of OM services.
29. To promote competition, National Grid is working to ensure that Operating Margins services are contestable such that any artificial barriers to competition can be reduced or removed and any provider who can reasonably provide the service is able to do so.
30. In order to facilitate the contestability of OM services, National Grid has led developments in a number of areas to both increase the scope of potential providers and encourage further participation of existing providers.

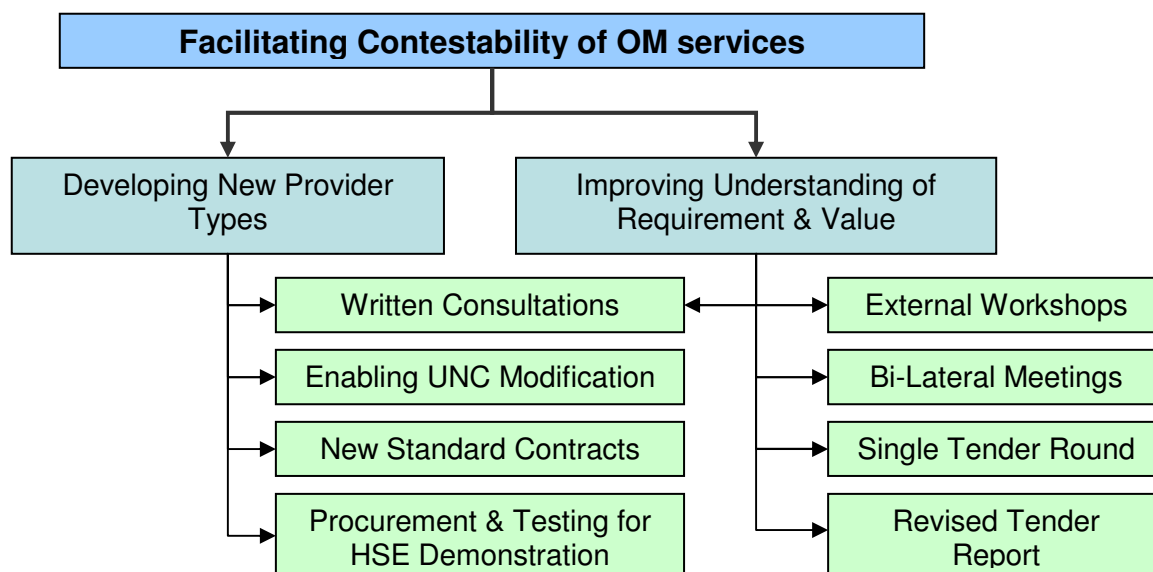


Figure 3.1 High Level Summary of Contestability work areas since 2007.

Developing New Provider Types

31. An OM workshop⁹ was held with a range of industry participants¹⁰ in order to describe the requirements of an Operating Margins service such as reliability,

⁹ Slides and Questions and Answers from the OM Contestability Workshop in April 2008 are available here: <http://www.nationalgrid.com/uk/Gas/OperationalInfo/gasoperatingmargins>

availability and response times. The current mode of provision from gas-in-storage was also explained.

32. The workshop discussed the potential for new forms of OM provision and facilitated discussion of each form during the consultation period for the Operating Margins Contestability Initial Consultation Document¹¹.
33. Following responses from industry to the two consultations¹² and a range of bi-lateral meetings, the main focus became whether a reduction in demand from the NTS or an increase of supply onto the NTS could provide Operating Margins in the future. If successful, this would facilitate the procurement of Operating Margins from a wider market.
34. In order to allow this new type of provider, National Grid needed to change both the UNC and the Safety Case which stated that Operating Margins must be in the form of gas held in storage.
35. As a result, National Grid Gas proposed UNC Modification 0240 "Promoting Competition in Operating Margins Provision" to enable NTS-connected supply and demand sources to provide Operating Margins services under the UNC. The modification was approved and implemented on 16th February 2009.
36. For a material Safety Case change to be accepted by the Health and Safety Executive (HSE), National Grid Gas has to demonstrate that using these new OM provision types would not increase the possibility of a supply emergency occurring when compared to the level of service that current service providers are able to deliver.
37. As such, offers were requested from potential service providers as part of the 2009/10 open tender process. In order to promote competition and to reduce the potential legal burden on potential participants, standard contract terms were developed for current storage and new demand and supply side facility providers as part of the 'invitation to tender'.
38. National Grid received seven offers for 120GWh/day of Operating Margins services for the storage year 2009/10 for a gas delivery service from this new type of provider. Two offers were accepted:
 - A portfolio of supply increase and demand reduction from a number of Power Stations, a supply point and an Industrial Load from one shipper; and
 - A single power station demand reduction from another shipper.

¹⁰ Participants included representatives from storage operators, shippers (including those with interests in LNG importation/storage terminals, large industrial gas users, distribution network operators, trade associations and Ofgem.

¹¹ http://www.nationalgrid.com/NR/rdonlyres/67DFB9FA-E2BC-4306-AAF4-C04DE80F24B0/24091/OM_Consultation_Doc_Issue1.pdf

¹² The OM Contestability Initial Consultation in Spring 2008, Conclusions on Operating Margins Contestability And Initial Thoughts for Associated SO Incentive Arrangements in Autumn 2008 and the responses received are available at <http://www.nationalgrid.com/uk/Gas/OperationalInfo/gasoperatingmargins>.

39. Testing of these providers is taking place this summer to enable National Grid to make a Safety Case Demonstration to the HSE. If the Safety Case Demonstration is successful, this would enable the Safety Case to be changed to allow new forms of Operating Margins provision from demand reduction and/or supply increase. Appendix 1 contains details of the progress to date on testing potential providers.
40. National Grid intends to submit the Safety Case Demonstration to the HSE within timescales that would enable the HSE to review and make a decision before the end of 2009¹³. Therefore, it should be clear whether a Safety Case Demonstration is successful in advance of the 2010 Operating Margins tender in early 2010.

Improving Understanding of Requirement & Value

41. To promote the Operating Margins service and ensure that the tender process met the needs of both National Grid and potential participants, following the OM workshop, National Grid met bi-laterally with a number of interested parties to explain the current and potential OM services and the tender process before publishing the tender documents.
42. Tender documents for Operating Margins services for the storage years¹⁴ 2009/10 to 2011/12 were published 1 month before the tender submission date. This allowed providers the opportunity to consider the documents and formulate an offer. The tender was advertised through the mailing lists held by the Joint Office of Gas Transporters, through the Gas Operational Forum and to parties that have previously expressed an interest in providing OM.
43. In January 2009, Ofgem issued a letter¹⁵ discussing the potential for regulated prices (C3 prices), that define the price paid for OM services from NGLNG Storage, to be suspended if the tender process was sufficiently competitive. As a result of this, National Grid LNG Storage chose to submit tenders into the OM tender at non-regulated prices.
44. During the tender period, Ofgem published in a decision letter¹⁶ that it did not consider there had been effective competition in the provision of OM services despite significant progress made towards contestability and that it was therefore not appropriate to suspend the regulated prices¹⁷ for NGLNG Storage for the Storage Year 2009/10. The letter also stated that in the provision of some locational services, the possibility of effective competition is still not apparent at this stage.

¹³ Assuming timescales set out in the HSE Safety Case Assessment Manual

<http://www.hse.gov.uk/gas/supply/gasscham/gsmrscham.pdf>

¹⁴ The Storage Year runs from 1 May to 30th April

¹⁵ http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/Ingpc/Documents1/OM%20Contestability_ILMarlee.pdf

¹⁶ <http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/Ingpc/Documents1/OM%20contestability%20decision%20letter%20200209.pdf>

¹⁷ Prices for OM services from NGLNG Storage are regulated under Special Condition C3 of the Gas Transporters Licence in respect of the NTS.

45. Following the 2009/10 Operating Margins tender, National Grid published the Tender Information Report¹⁸. The report shows the tendered and accepted prices with and without regulated prices for NGLNG Storage to give market participants a better understanding of the market, value and tender assessment constraints.
46. National Grid also publishes the Procurement Guidelines Report¹⁹ annually following the end of the financial year. This report covers the Operating Margins services procured and utilised in addition to the gas purchases and disposals in the year.

Consultation Questions	
Question 3.1	Are there any other activities that National Grid could reasonably do to promote a contestable market and to make a successful safety case demonstration?
Question 3.2	What additional information would be useful if provided within National Grid's Invitation to Tender (ITT) documentation or Tender Information Report?

¹⁸ http://www.nationalgrid.com/NR/rdonlyres/AD4B4AD6-B80F-48CF-A6FA-C587D867A617/34216/OM_Tender_Information_Report.pdf

¹⁹ The Procurement Guidelines reports are available on National Grid's website at <http://www.nationalgrid.com/uk/Gas/OperationalInfo/operationaldocuments/ProcurementSystemManagementServicesStatementsReports/>

Section 4

Market & Competition in OM Services

This section reviews the market for Operating Margins services from both current and potential providers.

4.1 Operating Margins Provision

47. The Operating Margins contestability project has aimed to facilitate competition in the provision and procurement of Operating Margins services as described in Section 3. This section considers the potential providers in the market in order to assess the market and level of competition in OM services.
48. The current providers of Operating Margins are facility owners and capacity holders at:
 - Natural Gas Storage facilities;
 - Liquefied Natural Gas Storage Facilities; and
 - Liquefied Natural Gas Importation Facilities with Storage.
49. Potential providers of Operating Margins, subject to a successful safety demonstration, may be able to provide OM by:
 - Reducing demand on the NTS; and/or
 - Increasing supply onto the NTS.
50. Over the last year, there have been some changes in the facilities that can provide OM:
 - Dynevor Arms LNG Storage facility closed at the end of April 2009
 - Aldbrough Gas Storage Facility has commissioned
 - Grain Phase 2 has commissioned in Winter 2008
 - Dragon LNG Importation Terminal is commissioning this summer
 - South Hook LNG Importation Terminal is commissioning this summer

4.2 Volume of Competition in Operating Margins Provision

51. Both the requirement and market for Operating Margins provision is not homogeneous as a result of facility, network, and supply and demand characteristics. As a result, the provision of Operating Margins is subject to a number of constraints and a varied level of competition for each requirement type, as detailed below.
52. The useful volume of Operating Margins (or OM capability) of a facility is dependent on the facility characteristics (such as the response time, volume of gas and deliverability²⁰ available) and the type of facility.

²⁰ The rate at which gas can be delivered to the NTS is the potential deliverability of the site.

53. The type of facility is a factor in the volume of OM that can be provided. For example, in an emergency, when Orderly Rundown Operating Margins would be required, supplies would already be at maximum capacity and demands would be reducing their offtake.
54. Similarly, supply sources, including storage, may also be limited in their ability to provide OM to cover the supply loss requirement depending on supply assumptions for the site (e.g. if a storage site is forecast to predominately flow at its full rate then no capability would be considered against OM supply loss). Demand reduction sources are limited to being able to provide OM when the facility is offtaking demand from the NTS.
55. For each Operating Margins requirement type, there is a chart below of the expected volume of Operating Margins that could be provided by facility type based on these constraints²¹. There is also a chart of the potential²² and tendered volume of Operating Margins for 2009/10. The facilities that can currently provide OM are in blue²³. Potential providers are in yellow or orange.
56. The tendered quantity in each of each of the following charts is the minimum of the tendered volume (space for storage or number & volume of utilisations for delivery contracts) and capability of the facility. If a facility can fulfil more than one type of requirement (as is often the case), the total quantity that could be accepted may be constrained by the tendered volume.
57. Of the facilities that provide OM, only National Grid LNG Storage facilities are subject to pre-emption rights such that Operating Margins bookings have priority over other commercial bookings of storage capacity. The remaining storage facilities do not necessarily tender the facility's full capability to provide, with only 40% of their capability tendered in 2009/10.
58. Where OM services do not have priority for capacity bookings, the facilities may not be offering the maximum theoretical Operating Margins capability because Operating Margins is just one service of many that a facility can provide as Operating Margins is a customer within a larger market. For example, storage services are used by other customers for a range of reasons from trading (within day and seasonal) to securing supplies.

²¹ The data used to produce these charts includes assumptions of the demands and supplies forecast to flow on the NTS. The OM capability of a facility is calculated to be the volume of OM that a facility could provide.

²² For new service providers, deliverability is only considered to be available, once a sustained period of actual deliverability is demonstrated.

²³ LRS is Long Range Storage and consists of Rough Gas Storage Facility. MRS is Medium Range Storage. SRS is Short Range Storage and consists of the National Grid LNG Storage Facilities.

Group 1: Supply Loss & Demand Forecasting Error ²⁴

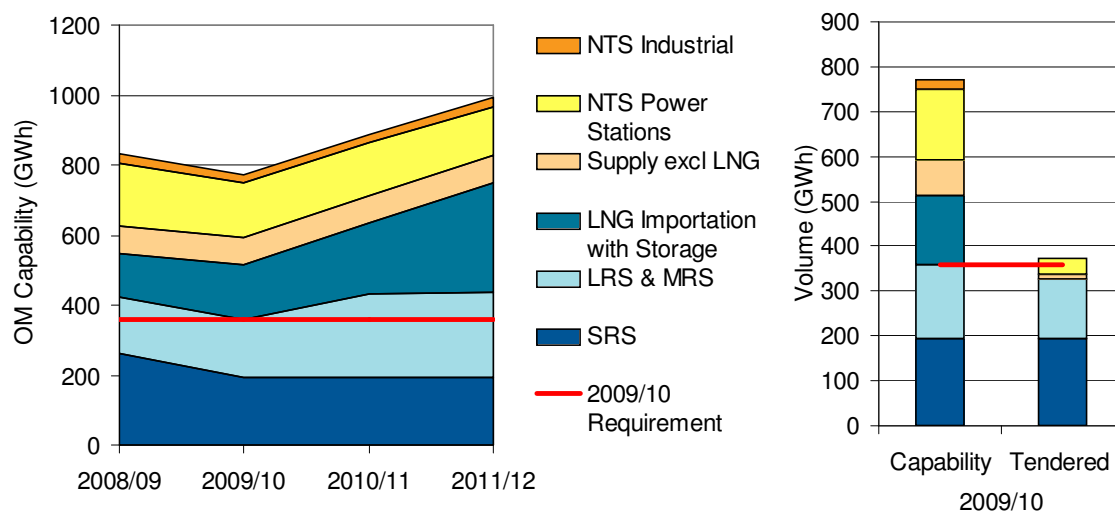


Figure 4.1: Group 1 capability of potential OM facilities by type including a comparison to tendered volumes in 2009/10

59. The graph shows that the current market of providers have enough capability to provide the Group 1 requirement, however there was a shortfall in the volume tendered to National Grid from current provider types (in blue) at the 2009/10 tender. There is the potential for new providers (in yellow and orange) to supplement the current pool of providers with additional MRS and LNG Importation facilities able to participate this year.

Group 2: Locational – North

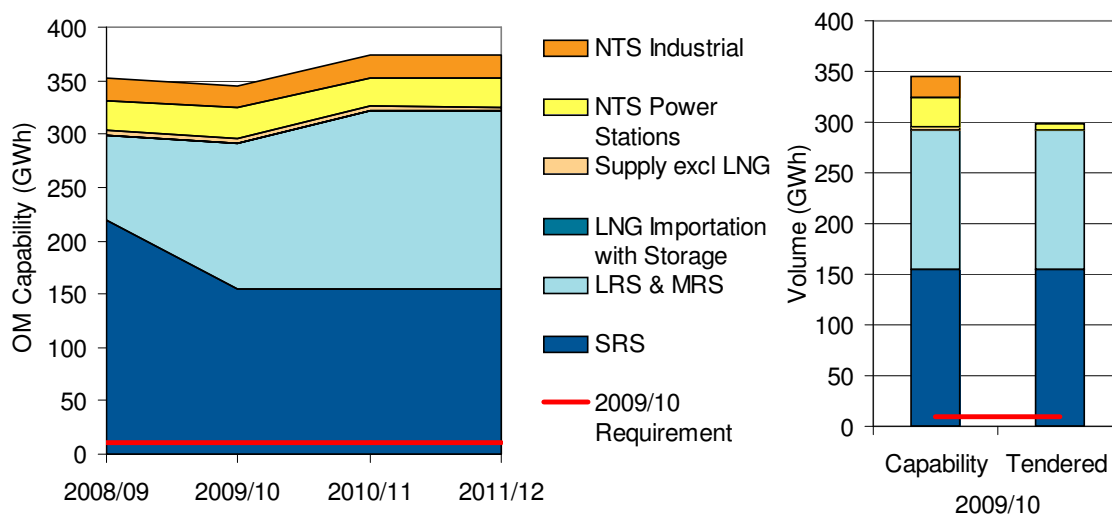


Figure 4.2: Group 2: Locational - North zone capability of potential OM facilities by type including a comparison to tendered volumes in 2009/10

²⁴ Please note that the graph stacking order of provider type capability in Figures 4.1 - 4.7 does not relate to an assessment hierarchy.

60. There are a large number of facilities in the North zone that can fulfil the small North locational requirement. The tendered volume far exceeds the requirement for OM in this zone.

Group 2: Locational – Scotland

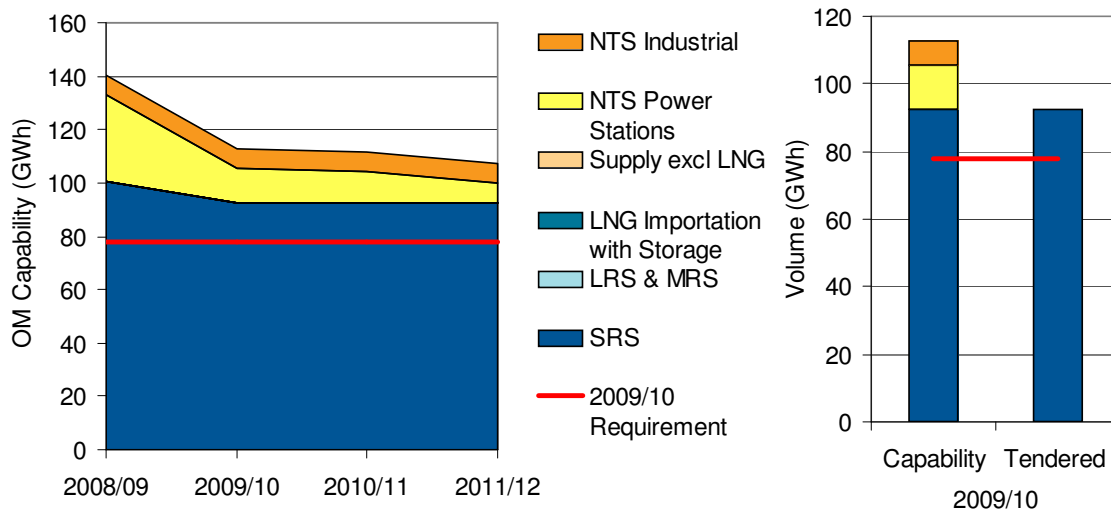


Figure 4.3: Group 2: Locational - Scotland zone capability of potential OM facilities by type including a comparison to tendered volumes

61. There is only one short range storage facility that is currently able to provide Operating Margins in the Scotland zone. There is the potential for further OM providers if a safety case change is successful, but new providers alone could not fulfil requirement.

Group 2: Locational – South

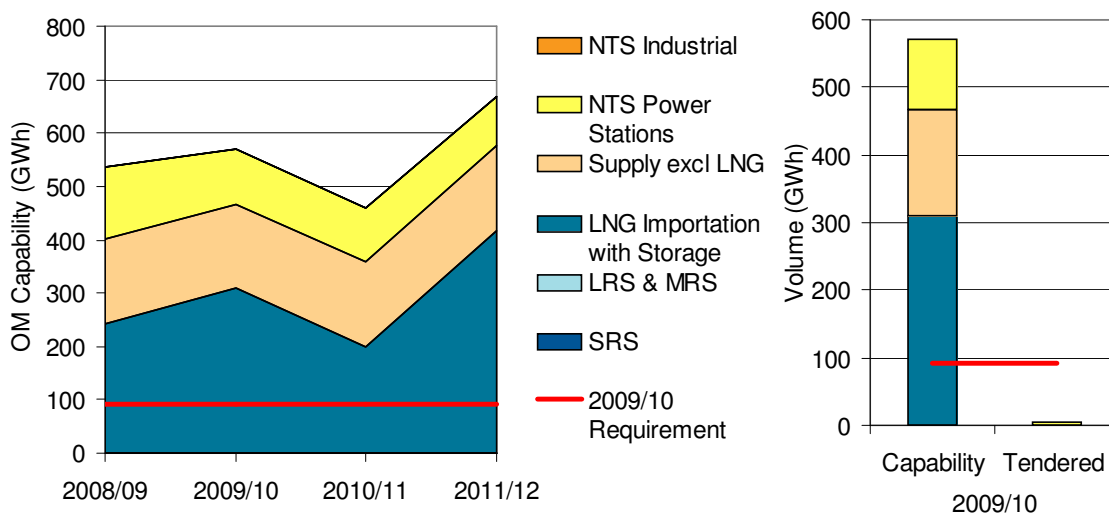


Figure 4.4: Group 2: Locational - South zone capability of potential OM facilities by type including a comparison to tendered volumes

62. Currently, only one LNG Importation terminal is able to provide Operating Margins in the South zone with the OM capability dropping in 2010/11. The capability in the zone is expected to grow following the expansion of the

terminal. None of the existing OM capability was tendered into the 2009/10 OM tender. There is the potential for further OM providers if a safety case change is successful.

Group 2: Locational – West

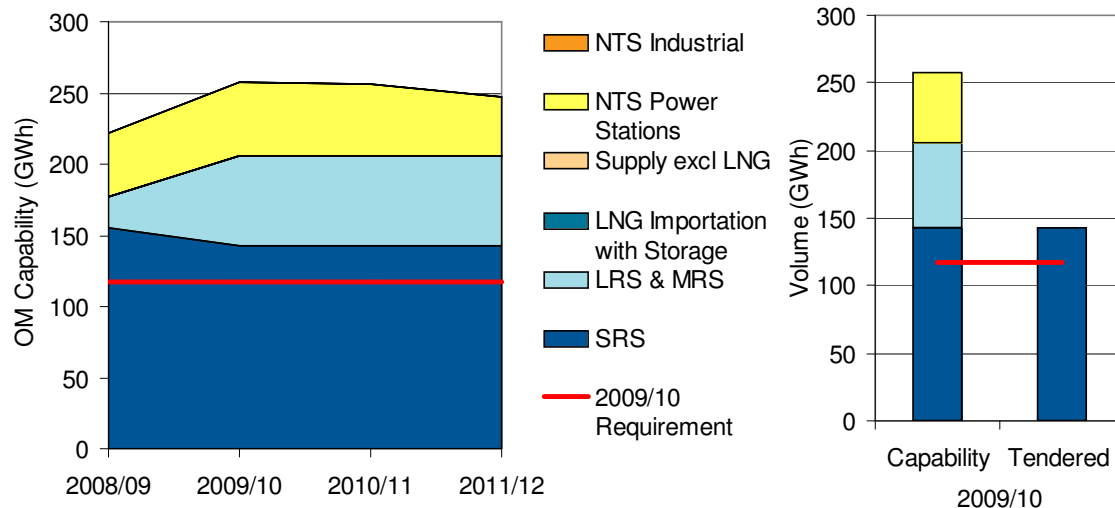


Figure 4.5: Group 2: Locational - West zone capability of potential OM facilities by type including a comparison to tendered volumes

63. The West locational zone has a short range storage facility and a medium range storage facility that are currently able to provide Operating Margins. There is the potential for further OM providers if a safety case change is successful.

Group 2: Non-locational

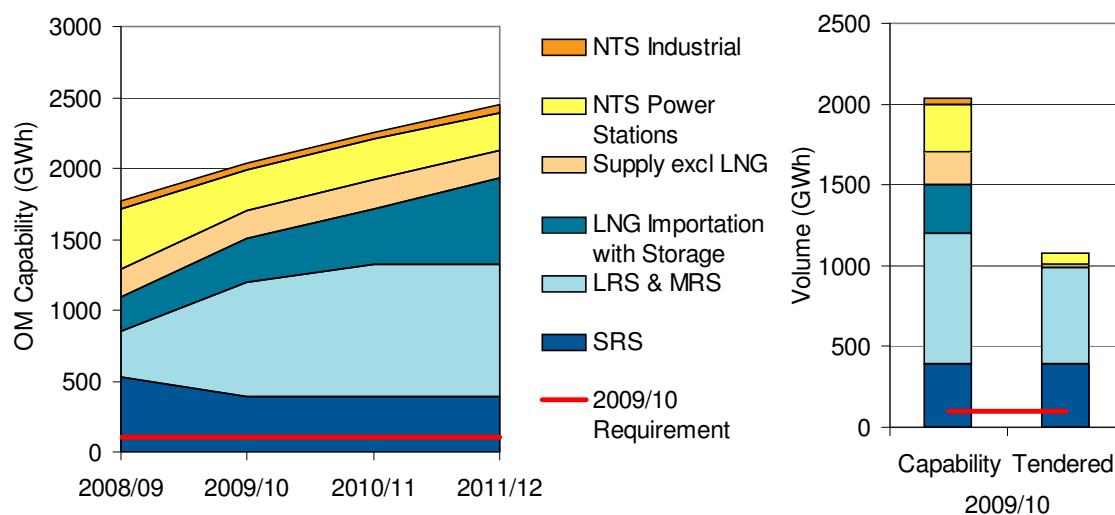


Figure 4.6: Group 2: Non-locational capability of potential OM facilities by type including a comparison to tendered volumes

64. There is a wide range of tendering providers of non-locational OM, from both current providers and potential providers if the safety case change is successful.

Group 3: Orderly Rundown

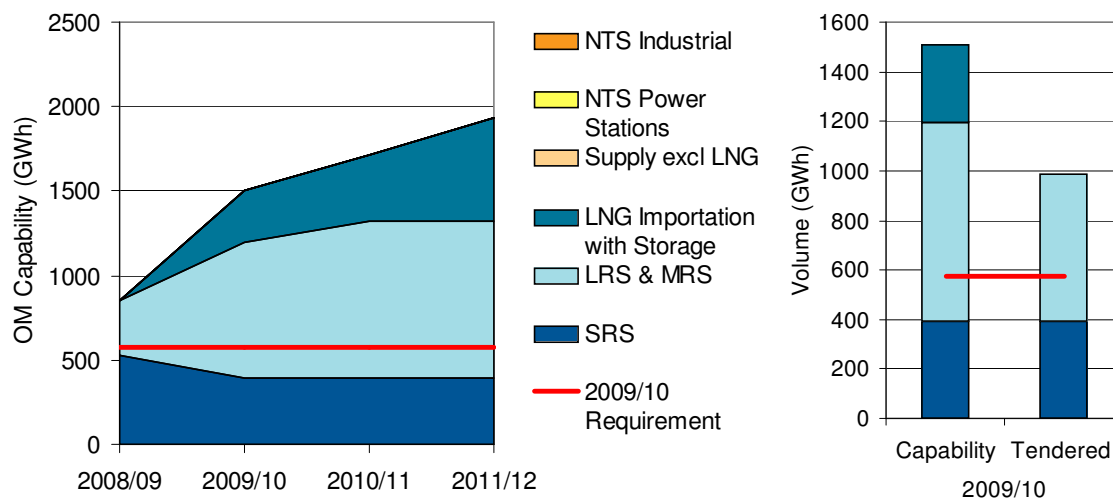


Figure 4.7: Group 3 capability of potential OM facilities by type including a comparison to tendered volumes

65. For the Orderly Rundown requirement, there is a range of tendering providers that are able provide this service. The volume tendered was sufficient to fulfil the requirement. Potential providers (NTS Demand and Supply) would not be able to provide this requirement as discussed earlier in this section.

4.3 Value of Operating Margins Provision

66. At the 2009/10 Operating Margins Tender, there was the potential for regulated prices for OM services from NGLNG Storage to be suspended. Therefore, the tender assessment was carried out both with and without the regulated price restriction. If regulated prices were in place for NGLNG Storage, the total estimated cost of Operating Margins at tender was approximately £18m. Without regulation of NGLNG Storage prices, the total estimated cost of Operating Margins at tender was approximately £37m.
67. During the tender period, Ofgem published a decision letter²⁵ that stated it did not consider there has been effective competition in the provision of OM services despite significant progress made towards contestability and that it was therefore not appropriate to suspend the regulated prices²⁶ for NGLNG Storage for the Storage Year 2009/10. The letter also stated that in the provision of some locational services the possibility of effective competition is still not apparent at this stage.

²⁵ <http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/Ingpc/Documents1/OM%20contestability%20decision%20letter%20200209.pdf>

²⁶ Prices for OM services from NGLNG Storage are regulated under Special Condition C3 of the Gas Transporters Licence in respect of the NTS.

4.4 Gas and electricity market interactions

68. Subject to a successful safety case demonstration, Operating Margins Services may be provided by reductions in demand from the NTS (including NTS Power stations on figures 4.1 – 4.7). Where an OM service is provided by NTS demand reduction from gas fired generation, there is the potential for an impact on the electricity market.
69. Participants in the electricity market may want to consider whether any issues surrounding OM provision from gas fired generation need to be considered by Ofgem.

Consultation Questions	
Question 4.1	Has National Grid sufficiently articulated the requirement and potential market for OM services?
Question 4.2	Do you believe the new provider types, if approved through the HSE Demonstration case, could form a significant component of future providers of OM? <ul style="list-style-type: none"> - NTS Industrial? - NTS Power Stations? - Supply Side (Excluding LNG Importation Facilities with Storage)?
Question 4.3	Have you any comments in relation to the potential interaction between demand side provision of OM services and the electricity market?

Section 5

2010/11 Operating Margins Procurement

This section summarises the Operating Margins procurement processes for 2010/11 and questions what additional information is required by the market in order to create an efficient and competitive tender.

5.1 Operating Margins Procurement

70. Operating Margins services can be bought through tender, bi-lateral contracts or through UNC processes for those sites where OM has pre-emption rights. Where economic and efficient to do so, National Grid uses a tender to procure OM services and publishes a Tender Information Report²⁷ on the outcome of that tender.
71. National Grid intends to run an Operating Margins tender in early 2010 for the OM services from 1 May 2010. The timescales of the tender are set out below:

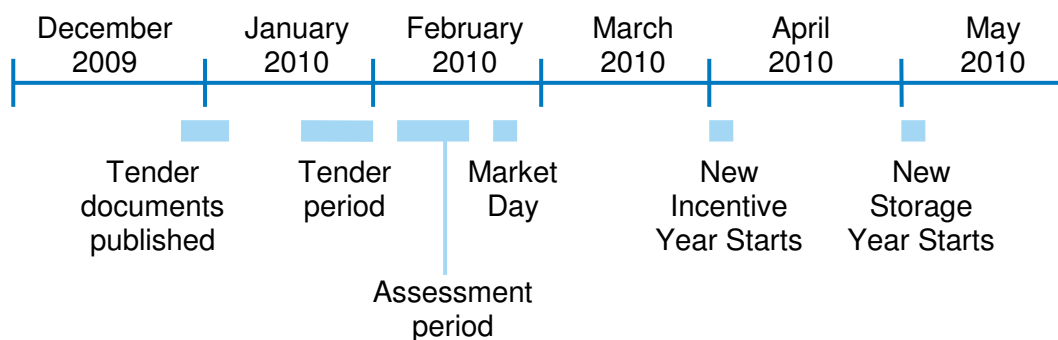


Figure 5.1: 2010/11 Operating Margins tender timescales

72. In order to allow providers time to review the tender documentation, it is intended that the documentation will be published in December in advance of the tender period in mid-late January as shown above in Figure 5.1.
73. The demand and supply side of OM services are currently being tested in order to facilitate a Safety Case demonstration if appropriate. These potential OM services cannot make up part of the Operating Margins requirement without a change to the Safety Case. We are endeavouring to work towards timescales which would facilitate a decision by the HSE in advance of the Operating Margins tender period.

²⁷ http://www.nationalgrid.com/NR/ronlyres/AD4B4AD6-B80F-48CF-A6FA-C587D867A617/34216/OM_Tender_Information_Report.pdf

74. Following the OM tender, there may be a change in the volume of OM held at each facility. Following on from the Operating Margins service tender, it is expected that tenders relating to gas re-profiling will be held in April in advance of the new Storage Year on 1st May.

Consultation Questions

Question 5.1	Does National Grid's proposed 2010 OM tender timescale affect, either positively or negatively, the ability for providers to participate?
Question 5.2	Is there any additional information which could be provided by prior to the tender which would help potential providers in clarifying their position on whether to participate?

Section 6 Incentive Structure

This section discusses the potential for Operating Margins to be incentivised and possible incentive forms.

6.1 Previous Incentivisation

75. Since 2002, an incentive has existed on National Grid to minimise the cost associated with procuring Operating Margins on behalf of the market through a single target cost²⁸ scheme with 100% sharing factors²⁹.
76. In 2008, the single incentive scheme was split into two distinct elements covering 'Availability' and 'Utilisation' costs. This separation allowed the overall scheme to better recognise National Grid's adopted risk profile associated with not securing full deliverability rights³⁰ for gas held in store when required for a low probability OM event. This dramatically reduces the overall annual cost to industry and minimises National Grid's potential intervention into the wider storage market.³¹
77. The 'Availability Incentive' therefore only covered the option costs associated with booking the required space in Storage sites for the OM gas, together with any costs associated with any 'deliverability contracts' to increase supply onto or reduce gas off the NTS.
78. Although this was the most material element of the scheme, the 'Availability' incentive also covered costs associated with moving the space booking between facilities at the start of the storage year (re-profiling) and any charges in bringing a facility to a ready state (standby) if required prior to utilisation.
79. The 'Utilisation Incentive' covered the cost of utilisation of Operating Margins services excluding those costs otherwise recovered through Section K of the UNC (the cost of the gas funded by National Grid). These costs included the charges relating to withdrawing gas in the event of an utilisation and re-injecting the gas if the Operating Margins gas stocks need to be replenished.

6.2 Current Year (2009/10) Incentive

80. Establishing a new contestable tender in 2009 brought with it a number of inherent uncertainties associated with type and volume of participation,

²⁸ The allowed revenue which National Grid can recoup through the Gas SO Commodity Charge

²⁹ Amount of risk shared with the community – 100% implies no potential additional cost / saving is passed through to the Commodity Charge. I.e. Operation of the Incentive will cost participants the agreed yearly allowed revenue or 'target' value as above.

³⁰ National Grid would pay the facility 'over-run' charges or attempt to secure short-term deliverability rights prior to utilisation

³¹ For Further details: Initial Proposals 2008 <http://www.nationalgrid.com/NR/rdonlyres/CD1B073C-77E6-4235-86F0-4F46E375B5DF/21919/GasandElectricitySOIncentivesInitialProposalsConsu.pdf>

together with the eventual price treatment of the regulated service providers which depended on an ex-post regulatory view of market competition.

81. As a result, National Grid was not able to produce a forecast of costs which could be used to set an incentive target ahead of the 2009/10 procurement timescales. In effect, the cost target for the 'Availability' incentive was set to actual costs for 2009/10, with procurement undertaken within National Grid's wider 'economic and efficient' role and out-turn costs reported to the industry through the quarterly incentive report which included the additional procurement of the trial OM providers.³²
82. As the Utilisation element of the OM incentive was not significantly affected by these factors, with both the probability of an OM event and costs associated with an instruction remaining similar, it was considered that the most effective regulatory treatment remained the scheme design proposed and implemented for the 2008/09 incentive year.

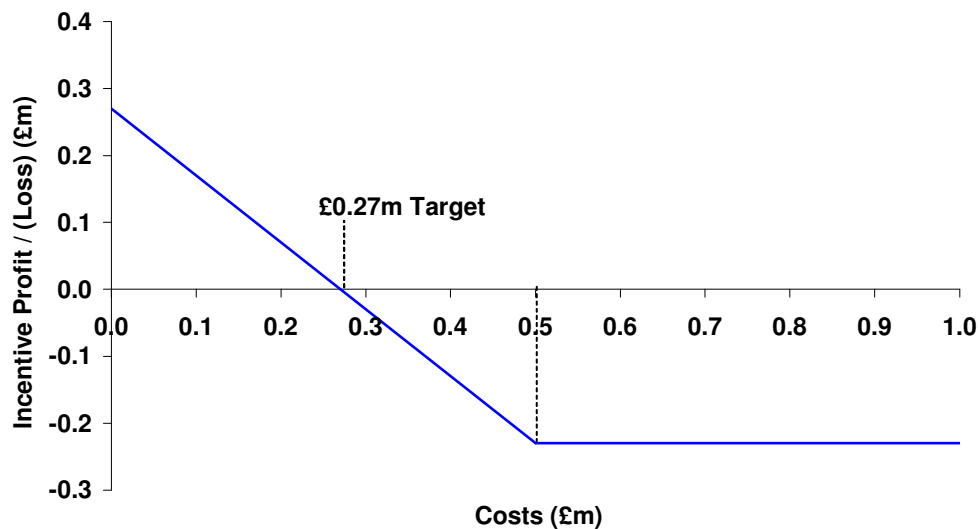


Figure 6.1: 2009/10 Operating Margins Utilisation Incentive

83. The 2008/09 sharing factors and target of the incentive continued to reflect the management of the minor 'background' costs with the collar helping mitigate the low probability high cost nature of a major Operating Margins utilisation.

6.3 Designing a Scheme for 2010/11

84. The feedback from the 2008/09 process was that participants understood the emphasis on developing a contestable market and the resultant requirement for cost pass through arrangements, but were keen for National Grid to try and reintroduce a form of cost target incentive as soon as possible.

³² <http://www.nationalgrid.com/uk/gas/soincentives/analystarea/>

85. This section therefore concentrates on the issues associated with introducing a new scheme in this context, but also asks whether or not 'total cost' minimisation as an objective and creating a 'target cost' as the mechanism continues to be the best approach.
86. Specifically the section also discusses whether the existing separation / interaction between the 'Utilisation' and 'Availability' part of the incentive remains appropriate and how the existing operating environment is different to that experienced in 2008.

6.3.1 The 'Availability' Incentive

87. In order to set an ex-ante cost target for 'Availability', whether absolute or indexed, a number of assumptions have to be made in respect to the constituent components of a cost forecast, namely against Volume and Price.
88. The volume of OM is calculated from a number of forecast assumptions on plant reliability, supply analysis and characteristics of the network. These assumptions can change over time, for example as the volume and nature of demand changes, but there exists no additional inherent uncertainty in the potential forecast lead-times of a target as compared to previous years.
89. The greatest uncertainty, and change from 2008/09, is in the individual site cost / price forecast used to generate a total 'Availability' target. This can be further broken down into two specific groups;
- National Grid LNG Storage Prices
 - New Provider Types

National Grid LNG Storage Prices

90. Operating Margins services provided by National Grid LNG Storage are currently subject to regulated prices under Special Condition C3 of the Gas Transporter Licence in respect of the NTS. There is a potential for these prices to be suspended or reviewed if competition is proven in an OM tender.
91. Overall the need for an ex-post decision on competition but an ex-ante cost target remains an issue for this year's procurement process and, although these prices could be indexed in an incentive design, the potential remains for large differences (from existing administered prices) to impact the locational and national assessment stack order and hence any total cost incentive.
92. However, as opposed to 2008, we now have a year's experience of running a contestable tender and assessing price both against administered 'C3' and as freely submitted through the market process. This has given us a greater understanding of the potential magnitude of differences and effect on the assessment stack which may potentially lead to approaches this year which can help mitigate this risk.

New Provider Types

93. As National Grid procures OM from a number of different provider types for whom providing Operating Margins is not their primary business, the total cost can therefore have a number of additional diverse drivers such as;
- Different duration storage facilities with have different market price drivers for capacity such as perceived peak price risk or gas price differentials between different time periods;
 - A gas fired generator may be priced on the basis of the price differential between various types of electricity generation or the potential lost opportunity of not being available for electricity generation;
 - Whilst an LNG importation terminal with storage capability could base its tender value on the potential to constrain the flexibility of its LNG shipping schedule.
94. If there is a change in the balance of Operating Margins towards gas delivery arrangements or to different storage facilities in a given year, there may be a need to re-profile gas such that it is held in the facilities where capacity is held. A change in the location of OM holdings could be as a result of a change in the Operating Margins requirement, pricing hierarchy or as a result of changes in the stack of offers made at tender. The costs of re-profiling may include charges for injection and injection rights or overruns, withdrawal and deliverability rights or overruns and gas transfer costs. At some facilities, there is also a cost associated with bringing a facility to a ready state (standby).
95. This additional complexity, although making the process of assessment more involved, does not make the efficient and economic merit stack solution unsolvable. The difficulty remains in then taking these parameters and creating a robust forecast for an incentive target.
96. As with 'National Grid LNG Storage' pricing however, this issue can now, to a certain extent, be offset by the experience of last year's tender in which both new providers (and associated pricing) and effects of large shifts to facility availability were evident.

6.3.2 'Utilisation' Interaction with 'Availability'

97. OM can be held using storage capacity contracts or gas delivery contracts, where a third party holds gas or the ability to turn up supply or turn down demand on behalf of National Grid.
98. As such, when a range of providers are able to provide OM, including by demand reductions and/or supply increases, these facilities will each have different price and cost drivers and potentially a different balance between the cost of holding OM provision and utilisation costs in their contract structure.

99. The separate 'Utilisation' element of the scheme therefore has the potential to create perverse incentives on National Grid to manage its exposure and opportunity through the types of contracts it accepts. The extent (amount & magnitude) of this interaction in practice, the downsides of a combining the elements (See paragraph 76) and views for alternative options forms part of this initial consultation.

6.3 Missing Cost of Gas Held in Store

100. As discussed throughout this document, the option to increase gas onto or reduce gas off the NTS gas is either procured by direct or indirect means;

- Directly through 'Deliverability Contracts': In which the provider is responsible for the costs / actions associated with having the availability of the deliverability gas if required.
- Indirectly through 'Storage Space Contracts': In which National Grid is responsible for procuring and positioning (if required) the associated gas to the deliverability requirement.

101. Although the UNC provides a mechanism to cover any changes in gas price (between procurement & utilisation), there currently exists no allowances for funding the value of this gas (asset) held in store³³.

102. This 'lost opportunity' cost therefore has the potential to be factored into future procurement decisions and could influence the contract assessment stack in line with our obligation to be economic, efficient and co-ordinated when comparing indirect and direct procurement routes.

6.4 Length of incentive

103. Since 2007, Operating Margins incentives have been set for a period of one year. Setting an OM incentive over a longer period of time would require multi-year volume requirements to be derived. Though OM requirements are calculated using an established methodology, there will be increasing uncertainty over elements that feed into the methodology as lead-time increases, which could mean that requirements might outturn higher or lower than anticipated by a long term incentive target agreed in advance. Note that as requirements could be revised up or down, there would be no guaranteed 'volume' benefits for National Grid through agreeing a longer-term scheme.
104. A longer term OM incentive would also require either an accurate view of the drivers for Operating Margins costs (such as storage charges, costs associated with downstream impact of demand-side OM provision such as electricity generation) or a mechanism such as indexation or a process for

³³ The current value of gas held in store is approximately £9m.

target review to manage uncertainty. Further, the increased cost and volume risk of a longer-term incentive is likely to go hand in hand with a mechanism to allow the sharing of incentive benefits/costs.

105. Under a longer term incentive scheme there would be more potential for longer term contracts to enable savings in the 'Availability' costs of OM. If a longer term incentive were to be considered, it would be difficult to set an incentive for more than two years, as this timescale would reduce the impact on the incentive of changes in regime following exit reform or the next Transmission Price Control Review.
106. The incentive targets are currently usually finalised in February/March before the Incentive Year (commencing 1 April) and Storage year (commencing 1 May). This effectively limits National Grid into a window of procurement which extends to only a matter of months. A longer term scheme would allow more discretion as to when National Grid could enter the market for these services.

Consultation Questions	
Question 6.1	Is it appropriate to incentivise Operating Margins given the range of uncertainties? If so, what would be the most appropriate way (e.g. Cost minimisation) to incentivise Operating Margins?
Question 6.2	Should the OM Incentive scheme continue to be separated into an 'Utilisation' and 'Availability' element?
Question 6.3	Should National Grid be able to recover a return on the gas held in storage for OM purposes?
Question 6.4	What would be an appropriate length of an incentive?

Section 7

Summary of Questions

This section provides a summary of the questions contained within this document. Responses to these questions are requested by 2nd October 2009. If you would like to discuss the issues raised in this document or other SO Incentive issues please contact us using the contact details in Section 8 of this document.

Question 3.1	Are there any other activities that National Grid could reasonably do to promote a contestable market and to make a successful safety case demonstration?
Question 3.2	What additional information would be useful if provided within National Grid's Invitation to Tender (ITT) documentation or Tender Information Report?
Question 4.1	Has National Grid sufficiently articulated the requirement and potential market for OM services?
Question 4.2	Do you believe the new provider types, if approved through the HSE Demonstration case, could form a significant component of future providers of OM? <ul style="list-style-type: none"> - NTS Industrial? - NTS Power Stations? - Supply Side (Excluding LNG Importation Facilities with Storage)?
Question 4.3	Have you any comments in relation to the potential interaction between demand side provision of OM services and the electricity market?
Question 5.1	Does National Grid's proposed 2010 OM tender timescale affect, either positively or negatively, the ability for providers to participate?
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Question 6.3	Should National Grid be able to recover a return on the gas held in storage for OM purposes?
Question 6.4	What would be an appropriate length of an incentive?

Section 8 Contact Details

If you would like to discuss any issue on SO Incentives, please contact us via the contact details below

To register your interest in receiving future communications on this consultation process please email: SOIncentives@uk.ngrid.com

On the web:

New dedicated web pages for this process are available at the following addresses:

Electricity SO Incentives: <http://www.nationalgrid.com/uk/Electricity/>
Gas SO Incentives: <http://www.nationalgrid.com/uk/gas/>

Talk to us:

Gas

John Perkins Tel: 01926 656337 john.perkins@uk.ngrid.com

Electricity

Malcolm Arthur Tel: 01926 654909 malcolm.arthur@uk.ngrid.com

General enquiries: SOincentives@uk.ngrid.com

Appendix 1: Testing Potential OM Providers

A.1: 2009/10 OM tender

107. In order to be able to assess whether demand reduction and supply increase can provide the same level of service as gas held in storage, offers were invited in the 2009/10 OM tender from providers to increase the delivery of gas onto the NTS or reduce or delay the offtake of its nominated quantity of gas from the NTS.
108. National Grid received 7 offers for 120GWh/day of Operating Margins services for the storage year 2009/10 for a gas delivery service from potential provider types in the 2009/10 tender. Two offers were accepted:
- A portfolio of supply increase and demand reduction from a number of Power Stations, a supply point and an Industrial Load from one shipper; and
 - A single power station demand reduction from another shipper.
109. The gas delivery services are being procured in addition to the OM services that are required to meet the Operating Margins Requirements in order to demonstrate the suitability of the new provision types. These services do not meet the current requirement in the Safety Case for Operating Margins to be provided by gas in storage. Further information on the outcome of the 2009/10 tender is available in the 2009/10 Operating Margins Tender Information Report³⁴.

A.2: Testing of potential providers of OM

110. In order to build a Safety Case demonstration, testing of the accepted tenders is taking place over the summer to enable National Grid to consider whether Operating Margins can be delivered by demand reduction and/or supply increase to the same level of robustness as gas held in storage.
111. The contracts are being used to test various aspects of the service including:
- Communication
 - Physical delivery
 - Service availability
 - Complexity of the instruction process
 - Ability to maintain service delivery
 - Delivery response time

³⁴ http://www.nationalgrid.com/NR/ronlyres/AD4B4AD6-B80F-48CF-A6FA-C587D867A617/34216/OM_Tender_Information_Report.pdf

112. Four physical tests and three communications tests of potential Operating Margins services have been carried out in June, July and August and further testing is planned over the summer.
113. National Grid has met the HSE on a number of occasions to discuss the potential services and testing regime, to ensure that the testing meets the HSE's requirement to consider a material Safety Case change.
114. If appropriate, following analysis of the Operating Margins tests, a safety case demonstration will be submitted to the HSE in early autumn. National Grid intends to submit the Safety Case Demonstration to the HSE within timescales that would enable the HSE to review and make a decision before the end of 2009³⁵. Therefore, it should be clear whether a Safety Case Demonstration is successful in advance of the 2010 Operating Margins tender in early 2010.
115. As the process continues, National Grid will continue to provide updates to industry as appropriate.

³⁵ Assuming timescales set out in the HSE Safety Case Assessment Manual
<http://www.hse.gov.uk/gas/supply/gasscham/gsmrscham.pdf>