

# **Safety Monitor Requirements 2006/07**

**4 September 2006**

## **Introduction**

This document sets out the approach that we are minded to take to the calculation of the initial Storage Safety Monitor Requirements for the 2006/07 winter. It should be read in conjunction with the “Winter 2006/07 Consultation Update Document”, published in July<sup>1</sup> (‘the July consultation’). The methodological basis for the safety monitor calculations is described in the paper “Safety & Firm Gas Monitor Methodology” published in November 2005<sup>2</sup>. Given its safety case obligations, the absolute level of the safety monitors is for National Grid to decide. However, we would be pleased to receive views on the approach described in this note. Safety monitor levels for 2006/07 will be confirmed by 1 October 2006.

## **Overview of Winter Consultation**

Through the course of the summer, we have conducted an extensive consultation process on the outlook for the 2006/07 winter. In particular, we have sought to establish a base case for the gas supply background that reflects the collective best view of the industry. Responses to the July consultation have broadly endorsed the supply base case on which we consulted in that document. It is recognised, however, that while the base case represents a reasonable ‘best view’, a significant level of uncertainty remains associated with both the construction and commissioning of new importation infrastructure, and the availability of supplies to utilise this infrastructure.

The consultation process has also focused on our latest demand forecasts, where a particular point of interest has been the reduction in the forecast of Non-Daily Metered (NDM) demand. Here, as with supply, responses have indicated that our revised forecasts are sound, whilst recognising that there is a material risk that NDM demand may be higher than forecast under very cold conditions (for which we have no recent evidence of consumer behaviour).

In the July consultation, we published a range within which we believed that the start-of-winter safety monitors were likely to lie. As a result of the risks associated with the supply and demand backgrounds, this range was asymmetric around the base case. The theme of the consultation responses on the issue of the safety monitors was an acknowledgement of the need for a prudent approach mixed with concern over the limitations placed by the monitors on the use of storage.

(In late September we will publish the Winter Consultation Report, which will provide more detailed feedback on the consultation and present our latest analysis of the coming winter.)

## **Approach to the 2006/07 Safety Monitors**

On the basis of the winter consultation process, and our latest assessment of the supply-demand position for the coming winter, we have concluded that a risk element should be built into the initial safety monitor levels. We do not agree with those who

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<sup>1</sup> [http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15693\\_MainbodyJulyfinaldoc070706.pdf](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15693_MainbodyJulyfinaldoc070706.pdf)

<sup>2</sup> <http://www.nationalgrid.com/uk/Gas/Data/misc/>

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argue that safety monitors should always be based on a 'best view' of supply and demand. The purpose of the safety monitors is to ensure that an adequate pressure can be maintained in the network at all times and thereby protect public safety. A prudent approach is therefore required.

It should also be noted that there is an asymmetry of risk associated with the ongoing review of the safety monitors. If, as the winter progresses, the level of supply-side risk reduces (e.g. once all of the new infrastructure is operational), it may be possible to reduce the safety monitors at that time. However, if the monitor levels need to be increased (e.g. if it becomes clear that the assumed level of supply is too high) there is no guarantee that storage stocks will not already be below the new monitor levels.

For these reasons, when the supply-demand background is particularly uncertain, it is appropriate to use a more cautious set of assumptions than the 'best view' in the safety monitor assessment. The following sections explain the approach that we are minded to take to the safety monitor calculation in relation to supply and demand respectively.

### Supply Assumptions

Given the significant level of uncertainty associated with the supply background, relating both to the construction and utilisation rates of new importation infrastructure, we are minded to assume a level of supply 15 mcm/d below the base case across the winter. It is possible to identify a number of different and plausible scenarios in which supply levels could be depressed to this extent.

Table 1 shows the base case supply assumptions from our Winter 2006/07 Consultation Update Document, and the additional 15 mcm/d supply risk allowance. Table 2 shows the anticipated availability of storage capacity in winter 2006/07.

**Table 1 – Supply Assumptions by Supply Source**

<b>Supply source</b>	<b>Assumed flow (mcm/d)</b>	<b>CV<sup>3</sup> (MJ/m<sup>3</sup>)</b>	<b>Assumed flow (GWh/d)</b>
UKCS	240	39.30	2620
Norway	48	40.00	533
IUK	35	38.82	377
BBL	14	39.00	152
LNG imports	13	39.63	143
Supply risk allowance	-15	39.00	-162
<b>Total</b>	<b>335</b>		<b>3663</b>

<sup>3</sup> An estimated CV has been applied to assist conversion of data published in both volumetric and energy terms

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**Table 2 – Storage Capacity Assumptions<sup>4</sup>**

<b>Storage type</b>	<b>Space (GWh)</b>	<b>Deliverability (GWh/d)</b>
Short (LNG)	1758 <sup>5</sup>	526
Medium (MRS)	8111	260 <sup>6</sup>
Long (Rough)	33805 <sup>7</sup>	455
<b>Total</b>	<b>43674</b>	<b>1241</b>

### **Demand Assumptions**

The basis for the calculation of the safety monitor levels is our 2006 demand forecasts for 2006/07, which are significantly lower than the equivalent forecasts produced in 2005. However, we are minded to include an additional 2% of domestic demand for the top 60 days of the 1 in 50 load duration curve, which represents an average incremental demand of less than 5 mcm/d. This approach provides partial mitigation against the risk that the new NDM forecasts understate domestic demand at very cold conditions, a risk acknowledged by many respondents to the July consultation.

We do not believe that this is overly cautious. Since we have forecast a reduction in domestic demand of approximately 2% between 2005/06 and 2006/07 (on account of further price increases), this risk allowance simply resets assumed domestic demand to around 2005/06 levels.

### **Initial Safety Monitor Levels**

Table 3 shows the initial safety monitor requirements on the basis of the assumptions outlined above.

**Table 3 – Safety Monitor Space Requirement**

<b>Storage type</b>	<b>Assumed storage capacity (GWh)</b>	<b>Space requirement (GWh)</b>	<b>Space requirement (%)</b>
Long duration storage (Rough)	33805	5682	17.1%
Medium duration storage (MRS)	8111	969	11.9%
Short duration storage (LNG)	1758	383	21.8%
<b>Total</b>	<b>43674</b>	<b>7034</b>	<b>16.8%</b>

<sup>4</sup> Excludes Operating Margins gas

<sup>5</sup> Lower than Winter Consultation due to 139 GWh Scottish Independent Undertakings

<sup>6</sup> Lower than Winter Consultation due to omission of Hole House Farm deliverability

<sup>7</sup> Reflects latest information from Centrica Storage Limited on anticipated space for winter 2006/07

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Given the concerns expressed to us regarding the potential limitations placed on storage use by the safety monitors, we should note that these initial levels are all below the equivalent safety monitor levels in place from October 2005.

### **Next Steps**

Given its safety case obligations, the absolute level of the safety monitors is for National Grid to decide. However, we would welcome any relevant new information since our July consultation on the 2006/07 supply-demand background. We would also be pleased to receive views from market participants on the approach that we are minded to take in relation to the supply and demand risks within the safety monitor calculation. These should be e-mailed to [simon.griew@uk.ngrid.com](mailto:simon.griew@uk.ngrid.com) or sent to:

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By 1 October, we will confirm the initial safety monitor levels for the 2006/07 winter and publish the within-winter profiles, showing how the safety monitor levels will reduce as the winter progresses.

As we did last winter, we will keep the monitors under review (both ahead of and throughout the winter) and make adjustments if it is appropriate to do so on the basis of the information available to us.