Preliminary Safety & Firm Monitor Requirements 2006/07

31st May 2006

Introduction

This document sets out 'Safety Monitors' and 'Firm Gas Monitors' for the 2006/07 winter, pursuant to National Grid's obligations under the Uniform Network Code Section Q. It is consistent with, and should be read in conjunction with the "Winter 2006/07 Consultation Document", published on 16 May[1]. The methodological basis for the safety monitor calculations is described in the paper "Safety & Firm Gas Monitor Methodology" published November 2005[2].

Our consultation document presented a base case scenario for the coming winter. However, it also highlighted the significant uncertainty associated with these key input assumptions, and sought industry feedback on a range of issues associated with the supply-demand position. Given the present level of uncertainty and the ongoing consultation, we have agreed with Ofgem that, at this time, it is most appropriate to publish initial monitor levels based on a range of potential outcomes rather than to publish single value monitor levels.

We are currently preparing our 2006 supply and demand forecasts reflecting the latest information provided to us by market participants through our 2006 Transporting Britain's Energy consultation process. Consequently, we expect to update our safety monitor analysis, taking into account our latest supply and demand forecasts in addition to any feedback that we receive on our consultation document. On the basis of this analysis, we will publish a further notice of safety monitor requirements in tandem with the next winter 2006/07 consultation document in June 2006.

It is our responsibility to keep the monitors under review (both ahead of and throughout the winter) and to make adjustments if it is appropriate to do so on the basis of the information available to us. In doing so, we must recognise that the purpose of the safety monitors is to ensure an adequate pressure can be maintained in the network at all times and thereby protect public safety.

We would welcome views on the appropriate basis for setting the 2006/07 safety monitors, both in terms of the resultant safety monitor requirements and the assumptions being made as part of the wider winter 2006/07 consultation.

[1] http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15058_8406b.pdf
[2] http://www.nationalgrid.com/uk/Gas/Data/misc/

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Supply

Table 1 shows the base case supply assumptions from our recent Winter 2006/07 Consultation Document. This base case was set out in the consultation as a reference point for illustration and comment. It does not represent a National Grid view of the supply outlook for winter 2006/07. Table 2 shows the anticipated availability of storage capacity in winter 2006/07.

Table 1 - Base Case Supply Assumptions

	Winter Consultation Base Case (mcm/d)	CV[3] (MJ/m3)	GWh/d
UKCS	240	39.30	2620
Norway	48	40.00	533
IUK	35	38.82	377
BBL	20	39.00	217
LNG imports	13	39.63	143
Total	356		3891

Table 2 - Storage[4]

	Space (GWh)	Deliverability (GWh/d)
Short (LNG)	1758[5]	526
Medium (MRS)	8111	260[6]
Long (Rough)	33220[7]	455
Total	43089	1241

Demand

The demand background used for the analysis in this section is the set of demand forecasts for 2006/07 that we produced in 2005, as outlined in the 2005 Ten Year Statement. We expect our 2006 forecasts to be lower than our equivalent 2005 forecasts reflecting the high gas prices experienced last winter and the expectation of high prices in 2006/07. This can be expected to put downward pressure on the safety monitors.

For the safety monitor analysis, all demands are allocated into one of two categories; 'protected by monitor' and 'protected by isolation'. Those demands protected by monitor include all non-daily metered (NDM) loads, firm Irish demand and priority daily metered (DM) loads. Currently, priority loads represent less than 1% of protected by monitor demands. The definition of priority loads is, however, currently under review

[3] An estimated CV has been applied to assist conversion of data published in both volumetric and energy terms
[4] Excludes Operating Margins gas
[5] Lower than Winter Consultation due to 139 GWh Scottish Independent Undertakings
[6] Lower than Winter Consultation due to omission of Hole House farm deliverability
[7] Reflects latest information from Centrica Storage Limited on the expected return to service of Rough and anticipated space for 2006/07

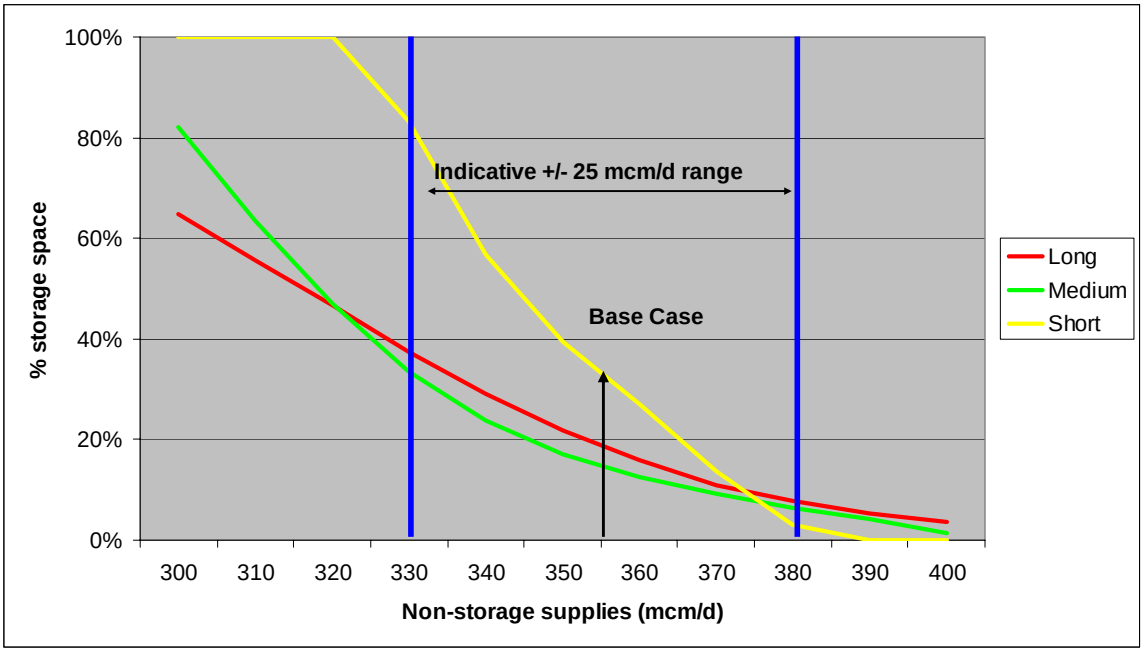
by the DTI. The DTI will go out to consultation on this subject shortly, with the outcome of the consultation due before winter 2006/07. At this time it is too early to assess the likely impact, if any, a change in priority load definition will have on the safety monitor levels for winter 2006/07.

Storage Safety Space Requirement

Figure 1 illustrates how the initial safety monitor levels would vary given changes to the supply-side assumptions. It shows a range, centred around the base case supply assumptions, to illustrate a spread of potential outcomes. The highlighted range shows an upside and downside of 25 mcm/d around the base case. This is broadly equivalent to an increase or decrease (respectively) of around 20% of the assumed average level of daily import flows. This highlighted range is purely indicative and for the purpose of example only: it does not represent an increase or decrease in any one particular supply source, and neither should it be inferred that there is equal probability of an increase or decrease in supplies around the base case. Neither should it be inferred that the ultimate basis for the safety monitors will necessarily lie within this range.

Whilst the range is shown as a change in supply, it can also be used to illustrate the impact of a change in the level of protected by monitor demand (with a decrease in demand equivalent to an increase in supply). By way of example, 5% of Non-Daily-Metered (NDM) demand equates to around 15 mcm/d across the winter months in a severe winter.

Figure 1 – Safety Monitor Levels as a Function of Supply Assumptions[8]



[8] The chart shown is slightly different to that shown in the Winter Consultation due to a minor change to the Rough storage space assumption and revised Medium duration storage deliverability assumption

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

Table 3 – Safety Monitor Space Requirement

Storage type	Assumed storage capacity (GWh)	Lower Supply (-25 mcm/d)	Base Case (356 mcm/d supply)	Higher Supply (+25 mcm/d)
		Space Requirement (GWh)		
Long duration storage (Rough)	33220	12342	6126	2536
Medium duration storage (MRS)	8111	2675	1170	502
Short duration storage (LNG)	1758	1435	568	44
Total	**43089**	**16452**	**7864**	**3082**
		Space Requirement (%)		
Long duration storage (Rough)		37.2%	18.4%	7.6%
Medium duration storage (MRS)		33.0%	14.4%	6.2%
Short duration storage (LNG)		81.6%	32.3%	2.5%
Total		**38.2%**	**18.2%**	**7.2%**

Storage Safety Deliverability Requirement

Table 4 – Peak NDM & Priority Demand[9] and Peak Day Supply

	Lower Supply (-25 mcm/d)	Base Case (356 mcm/d supply)	Higher Supply (+25 mcm/d)
Demand	GWh/d		
Peak NDM & Priority Demand	4397	4397	4397
May 2006 Base Case Peak Supplies			
UKCS	2620	2620	2620
Imports	1270	1270	1270
Storage	1241	1241	1241
Supply range	-271	0	+271
Total Supplies (B)	4860	5131	5404

[9] Diversified firm demand for a 1 in 20 peak day

Supply Surplus (B) – (A)	**463**	**734**	**1007**

Stored Firm Gas Space Requirement

Table 5 – Space Analysis (GWh)

Storage type	Assumed storage capacity (GWh)	Firm Stored Gas Requirement (GWh)	Firm Stored Gas Requirement
Long duration storage (Rough)	33220	26487	79.7%
Medium duration storage (MRS)	8111	9476	116.8%
Short duration storage (LNG)	1758	7931	451.1%
Total	**43089**	**43894**	**101.9%**

Storage Firm Gas Deliverability Requirement

Table 6 – Peak Firm Demand and Peak Day Supply

Firm Demand	GWh/d
Diversified 1 in 20 Peak Day (C)	5431
May 2006 Base Case Peak Supplies	
UKCS	2620
Imports	1270
Storage[10]	1331
Total Supplies (D)	5221
Firm Demand Response Required (C) – (D)	**210**

[10] Includes Hole House Farm

Next steps

As stated earlier, our "Winter 2006/07 Consultation Document"[1] highlighted the significant uncertainty associated with the supply assumptions for the base case scenario for the coming winter. National Grid would welcome views on the appropriate basis for setting the 2006/07 safety monitors, both in terms of the resultant safety monitor requirements and the assumptions being made as part of the wider winter 2006/07 consultation. In particular, for the purpose of setting the safety monitors:

- ***What assumptions should be made over the maximum UKCS supply availability for 2006/07?***
- ***We would welcome views on the likely levels of supply from the various import sources, and specifically:***
    - ***whether similar monthly variations to those observed last year can be expected in winter 2006/07 from the various import sources***
    - ***what assumptions should be made for levels of imported gas through the Belgian Interconnector for winter 2006/07***
    - ***what assumptions should be made for levels of imported gas through BBL for winter 2006/07***
    - ***what assumptions should be made for levels of imported gas from Norway for winter 2006/07***
    - ***what assumptions should be made for LNG importation quantities in winter 2006/07***
- ***We would welcome views on whether there is an equal probability of an increase or decrease in supplies around the base case. For example is there a greater upside potential than downside potential, or vice versa?***

All responses will be incorporated into the winter consultation process, and in particular will feed into assessing the safety monitor requirement. Responses received by 9 June 2006 will be included in a summary of responses on a non-attributed basis in the subsequent consultation report, which will incorporate revised safety monitors. Responses should be sent to:

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31st May 2006

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Where requested, we will treat information provided to us on a confidential basis. Alternatively, respondents may send confidential information to Ofgem if they would prefer (by e-mail to wholesale.markets@ofgem.gov.uk).