Gas Balancing Alert Proposal

Demand Side Working Group 21st September 2005 Eddie Blackburn



Summary

- The following represents a proposed methodology for setting a Gas Balancing Alert (GBA) based on a combination of the absolute Supply & Demand level and the impact of a potential breach of a Safety Storage Monitor
- The GBA should indicate a potential requirement for demand response
- The GBA will not cover the likelihood of Interruption to manage Transportation Constraints



Gas Balancing Alert (GBA)

- Initial Trigger level based on
 - Forecast Maximum Supplies
- GBA issued when
 - Forecast daily demand>Trigger Level
- Trigger level will be modified as each type of storage approaches its safety monitor



Gas Supply Assumptions

- Base case assumptions, applicable to the assessment of gas availability over a winter duration:
 - maximum daily gas delivery at the beach of around 327 mcm/d.
 - average beach gas availability of 92.5% of the maximum beach forecast, leading to an average beach delivery level of 303 mcm/d.
 - Interconnector imports at an average level of 42 mcm/d, equal to the present level of capacity plus 75% of the additional capacity, completion of which is now targeted for November.
 - Grain LNG imports at an average level of 13 mcm/d, equal to the contracted level of capacity but less than the maximum physical capability.
 - 75% of new and enhanced storage deliverability available.



2005/06 Supply – Base Case Assumptions*

Supply (mcm/d)	Maximum	Base Case Assumption	Comments
Beach	327	303	92.5% max beach
Grain	17	13	
IC Imports	48	42	75% new imports
Total Supply ex Storage	392	358	
Existing Storage	114	114	
New Storage	6	5	75% new storage
Total Supply inc Storage	512	477	

^{*}Assumptions consistent with those published in Safety Monitor Requirements Sept 2005



2005/06 Supply Forecast

Supply (mcm/d)	Maximum	Base Case Assumption
Total Supply ex Storage	392	358
Long Range Storage	42	42
Mid Range Storage	29	28
Short Range Storage	49	49
Total Storage	120	119
Total Supply inc Storage	512	477



GBA Trigger Calculation

	Level (Mcm/d)		
Base GBA Trigger	477		
		Potential Storage Breach?	Adjustment (Mcm/d)
LRS Adjustment		N	-42
MRS Adjustment		N	-28
SRS Adjustment		N	-49
GBA Trigger	477		



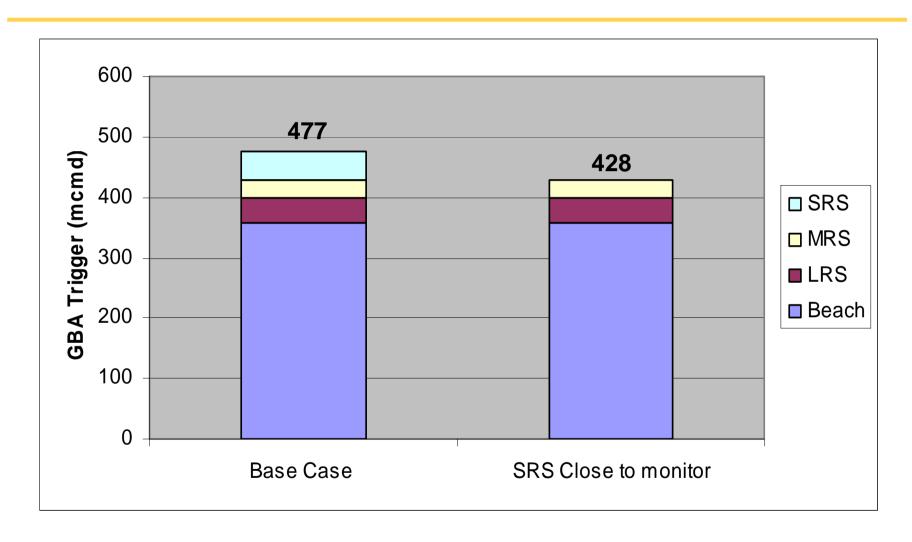
GBA Trigger Calculation - Example

SRS Monitor Approaching

	Level (Mcm/d)		
Base GBA Trigger	477		
		Potential Storage Breach?	Adjustment (Mcm/d)
LRS Adjustment		N	-42
MRS Adjustment		N	-28
SRS Adjustment	-49	Y	-49
GBA Trigger	428		



GBA Trigger Setting





GBA Trigger Setting

- LRS adjustment applies if
 - =<[2] days left based on maximum export rate
- MRS adjustment applies if
 - =<[2] days left based on maximum export rate
- SRS adjustment applies if
 - =<[2] days left based on maximum export rate



Storage Information

- Web page will show storage stock levels at 06.00
 D on 16.00 on D+1
- GBA trigger to use this information less any SFN information in order to decide if trigger should be revised.
 - May need further permission from storage operators



Historical Analysis

- At 477 mcm/d (86.5% peak) there would have been no GBA issued in the past 4 years
- At 428 mcm/d (77.6% peak) there would have been;
 - No GBA winter 2004/05
 - 5 GBA's winter 2003/04
 - 14 GBA's winter 2002/03
 - 3 GBA's winter 2001/02



GBA Trigger Timing & Sensitivity

- It is proposed that GBAs will be assessed and potentially issued following the 13:00 demand forecast on D-1 (day ahead)
- The GBA will be adjusted based on storage being less than or equal to [2] days from a breach based on the maximum rate
- It may be possible to issue the GBAs with more notice but this will increase their likelihood



GBA Name

Possible Options

- Gas Balancing Alert might be considered too harsh??
- Gas NISM inappropriate as no concept of gas supply margin
- Gas Balancing Cautionary Notice –
- Other suggestions on a postcard...... prize for the winner!!

