

Emergency Cashout Arrangements

Transmission Workstream
Thursday 3rd July 2008

Key principles considered

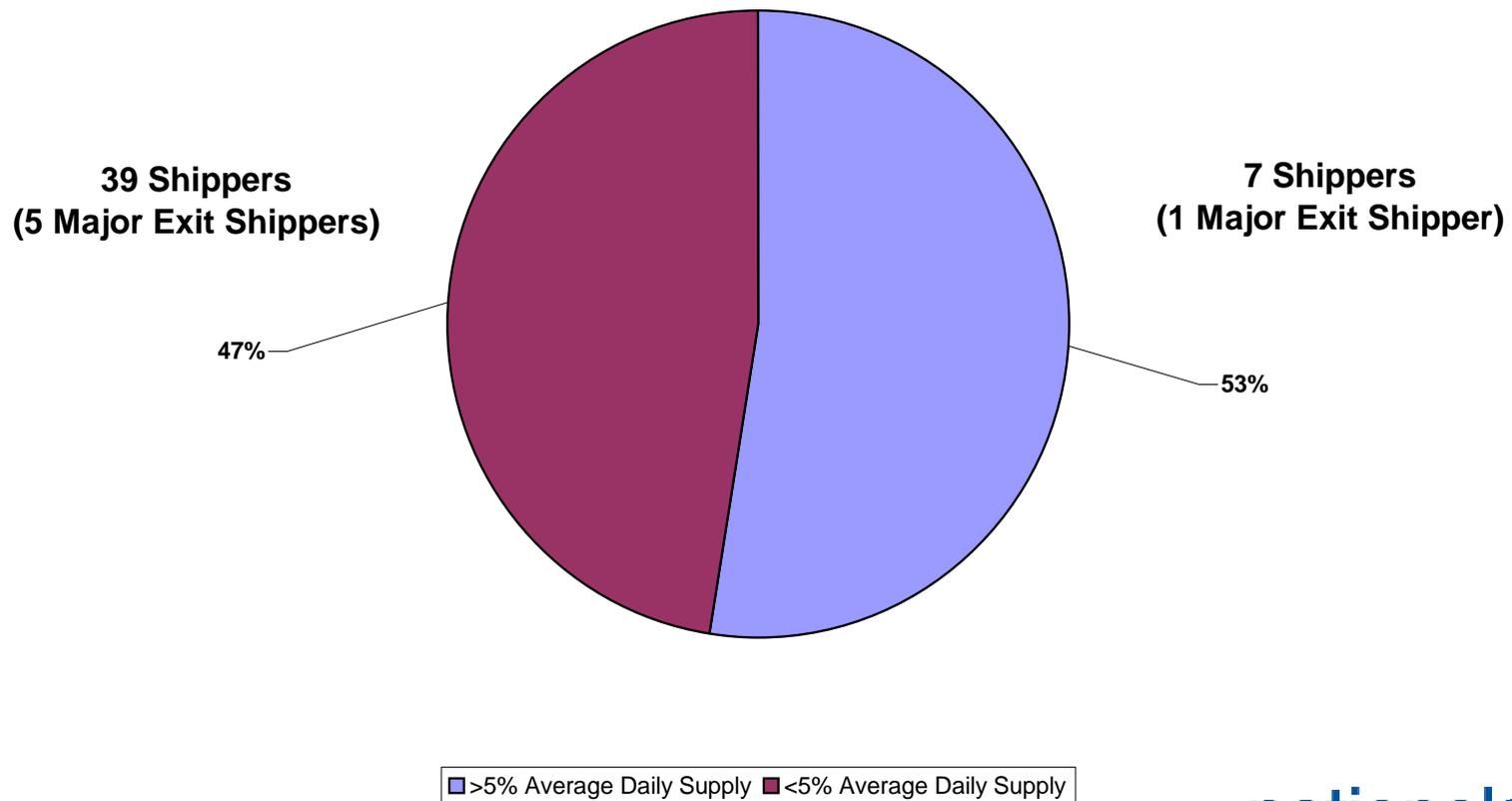
- ◆ Incentivise Shippers to avoid/mitigate a Gas Deficit Emergency.
- ◆ Encourage non-UKCS gas into the UK / further demand-side reduction.
- ◆ Emergency cashout price to reflect the cost of gas on the day – *transparency of costs*.
- ◆ Mitigate market manipulation and spiralling prices.
- ◆ Reduce risk of shipper defaults resulting from extreme cashout prices – *use of claims process where necessary*.
- ◆ Remain compliant with HSE / GS(M)R statutory obligations (criminal offence not to comply).

Shipper transportation types - analysis

- ◆ ‘Entry’ type shippers tend to *deliver* physical gas into the NTS and sell gas at the NBP.
- ◆ ‘Exit’ type shippers tend to offtake physical from the NTS but source (buy) gas at the NBP.
- ◆ There is a thought that ‘demand-side’ (exit) shippers might face the greatest risks during a GDE, however, after analysis, it appears large proportions of supplies are sourced through NBP contracts; assumption that these are not sensitive to within-day cashout prices.
- ◆ Perversely, it appears that it is the entry-type shippers that face most commercial risk as a consequence of a GDE if they are affected by supply losses.

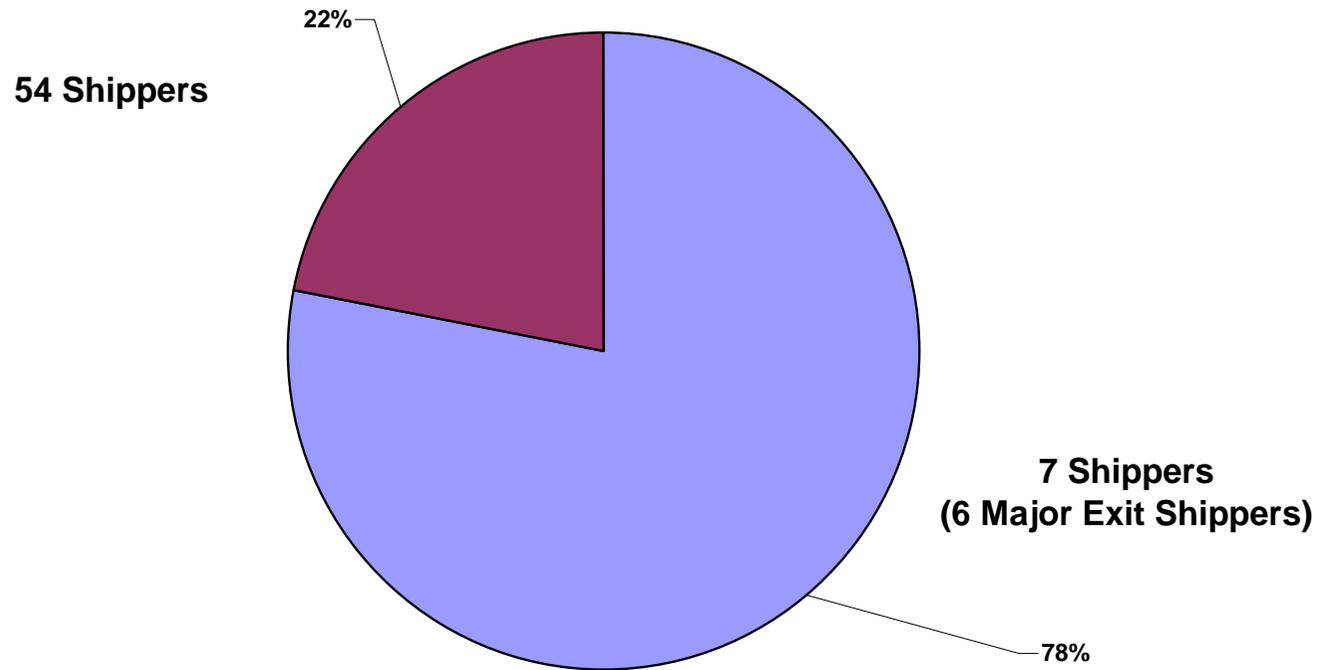
Supply

Shippers' Percentage of Average Daily Supply
February - March 2008



Demand

Shippers' Percentage of Average Daily Demand
February - March 2008



■ >3.5% Average Daily Demand ■ <3.5% Average Daily Demand

Consequences of a GDE Stage 2+

- ◆ Whilst the NTS supply/demand balance is attained by the NEC, as a consequence, some shippers will have significant long or short positions.
- ◆ The type of shipper e.g. predominantly 'entry' or 'exit', will influence the level of its imbalance risk due to its commercial arrangements.

GDE Balancing – example 1

Entry Shipper: sourcing gas on entry and disposing (sells) at the NBP

Balance position	Pre Emergency GBA	GDE Stage 1 Interruption (ECQ)	GDE Stage 2 Maximise supplies	GDE Stage 3 Firm Load Shedding (ECQ)	GDE Stage 4 Isolation and Allocation
Long	St Fergus / NBP 40 / 30 Net +10 [excess sold or claimed]	40 / 30 Net +10 [excess sold or claimed]	50 / 30 Net +20 [excess sold or claimed]	50 / 30 Net +20 [excess sold or claimed]	50 / 30 Net +20 [excess sold or claimed]
Short	Bacton / NBP 30 / 40 Net -10	20 / 40 Net -20 (problem at Bacton)	20 / 40 Net -20 (Shortfall purchased?)	20 / 40 Net -20 (Shortfall purchased?)	20 / 40 Net -20 (Shortfall purchased?)
Balanced	St Fergus / NBP 40 / 40 Net 0	40 / 40 Net 0	45 / 40 Net +5 [excess sold or claimed]	45 / 40 Net +5 [excess sold or claimed]	45 / 40 Net +5 [excess sold or claimed]

GDE Balancing – example 2

Exit Shipper: sourcing gas predominantly at the NBP (buys) to meet demand portfolio

Balance position	Pre Emergency GBA	GDE Stage 1 Interruption (ECQ)	GDE Stage 2 Maximise supplies	GDE Stage 3 Firm Load Shedding (ECQ)	GDE Stage 4 Isolation and Allocation
Long:					
<i>ECQ</i>	NBP / DM+NDM 40/30 Net +10	NBP / DM+NDM (ECQ -5 int) 40/30 Net +10	NBP / DM+NDM (ECQ -5 int) 40/30 Net +10	NBP / DM+NDM (ECQ -5 int, -5 firm) 40/30 Net +10	NBP / DM+NDM (ECQ -5 int, -5 firm), NDM -10 40/20 Net +20
<i>Self Interrupt</i>	NBP / DM+NDM (self -5 int) 40/25 Net +15	NBP / DM+NDM (self -5 int) 40/25 Net +15	NBP / DM+NDM (self -5 int, -5 firm) 40/20 Net +20	NBP / DM+NDM (self -5 int, -5 firm) 40/20 Net +20	NBP / DM+NDM (self -5 int, -5 firm), NDM -10 40/10 Net +30
Short:					
<i>ECQ</i>	NBP / DM+NDM 30/50 Net -20	NBP / DM+NDM (ECQ -5 int) 30/50 Net -20	NBP / DM+NDM (ECQ -5 int) 30/50 Net -20	NBP / DM+NDM (ECQ -5 int, 5 firm) 30/50 Net -20	NBP / DM+NDM (ECQ -5 int, -5 firm), -10 NDM 30/40 Net -10
<i>Self Interrupt</i>	NBP / DM+NDM (self -5 int) 30/45 Net -15	NBP / DM+NDM (self -5 int) 30/45 Net -15)	NBP / DM+NDM (self -5 int, -5 firm) 30/40 Net -10	NBP / DM+NDM (self int -5, -5 firm) 30/40 Net -10	NBP / DM+NDM (self -5 int, -5 firm), -10 NDM 30/30 Net 0
Balanced:					
<i>ECQ</i>	NBP / DM+NDM 60/60 Net 0	NBP / DM+NDM (ECQ -10 int) 60/60 Net 0	NBP / DM+NDM (ECQ -10 int, -5 firm) 60/60 Net 0	NBP / DM+NDM (ECQ -10 int, -5 firm) 60/60 Net 0	NBP / DM+NDM (ECQ -10 int, -5 firm), -15 NDM 60/45 Net +15
<i>Self Interrupt</i>	NBP / DM+NDM (self -10 int) 60/50 Net +10	NBP / DM+NDM (self -10 int) 60/50 Net +10	NBP / DM+NDM (self -10 int, 5 firm) 60/45 Net +15	NBP / DM+NDM (self -10 int, 5 firm) 60/45 Net +15	NBP / DM+NDM (self -10 int, 5 firm), -15 NDM 60/30 Net +30

Our preferred approach

- ◆ Simplistic/pragmatic?
- ◆ During GDE Stage 2+
 - ◆ Dynamic emergency cashout price to be set by ‘physical’ shippers e.g. those that are able to mitigate the GDE
 - ◆ Use of OCM physical market only to set emergency cashout price (NBP Title market closed)
- ◆ Use of posted OCM offers/bids (price/quantity) that are not taken as trades during GDE to be used in the Claims process. (Claims process requires review).
- ◆ No material changes required to be made to the NEC Safety Case.