

Winter Outlook Consultation 06/07

Ferrybridge Power Station

20 July 2006

Centrica Storage Limited

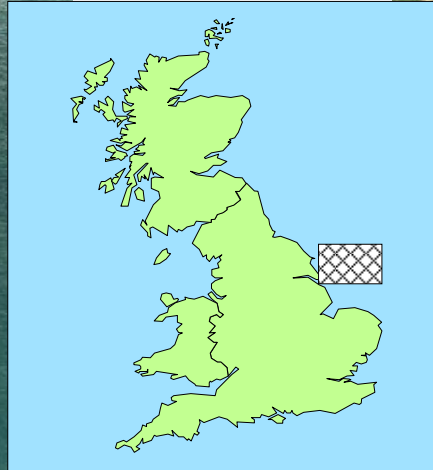
centrica

taking care of the essentials

Observations about Rough Storage use for Winter '06

1. **Introductions to CSL – the Energy Review and the role of storage**
2. **CSL investment in the Rough Storage facility – now and in the future**
3. **Incident at Rough – 16 February 2006**
 - **Latest Update**
4. **Storage Outlook for Winter 06**
 - **Injection**
 - **Withdrawal**
5. **The case for Storage cycling...**
 - **Commercial Incentives**
 - **Market Incentives**
 - **Market Information**
6. **Commercial storage v's strategic storage**
7. **Future 'commercial' storage outlook and the Energy Review**

Introduction to Centrica Storage

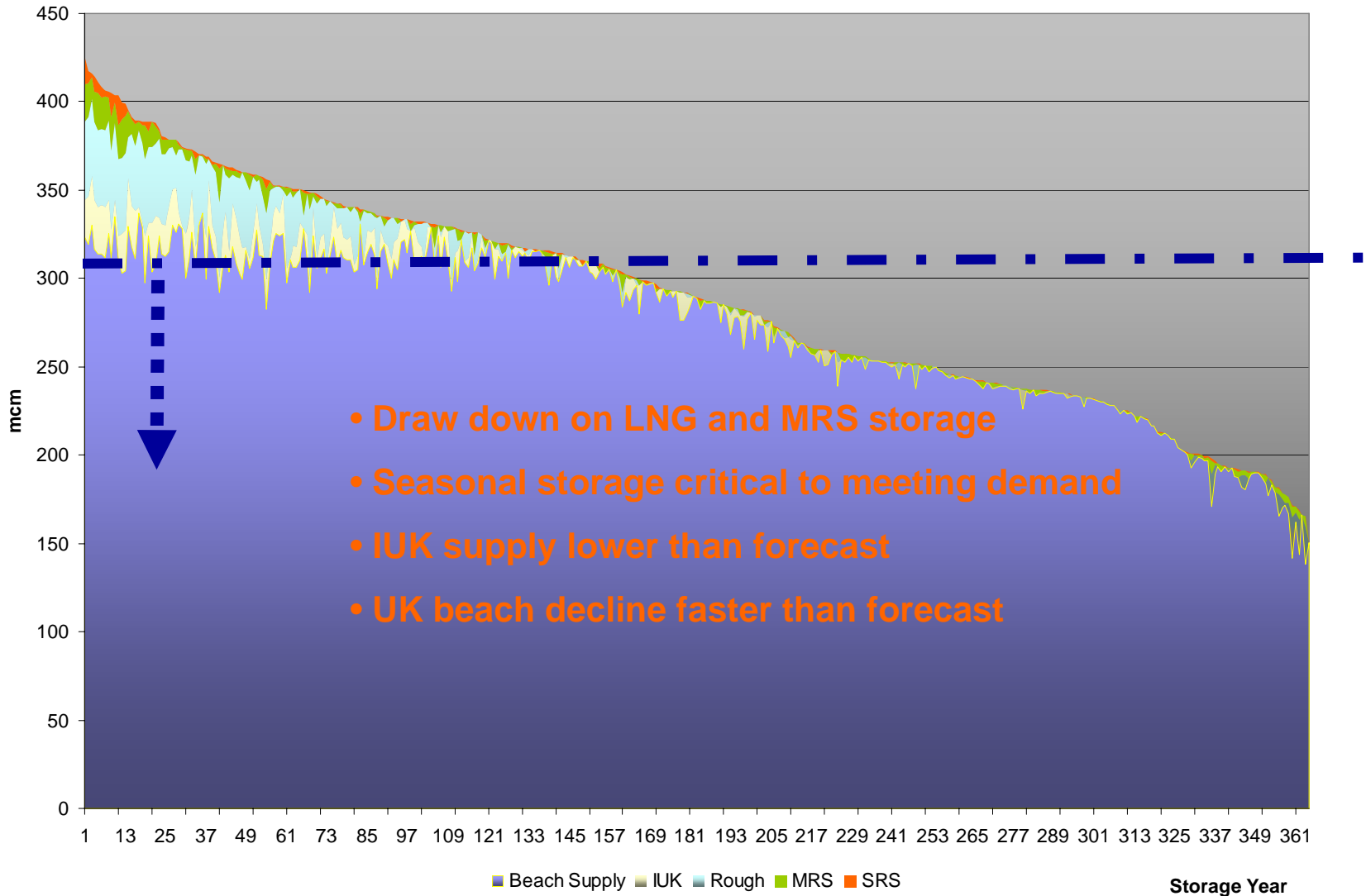


Offshore – 2 platform complexes

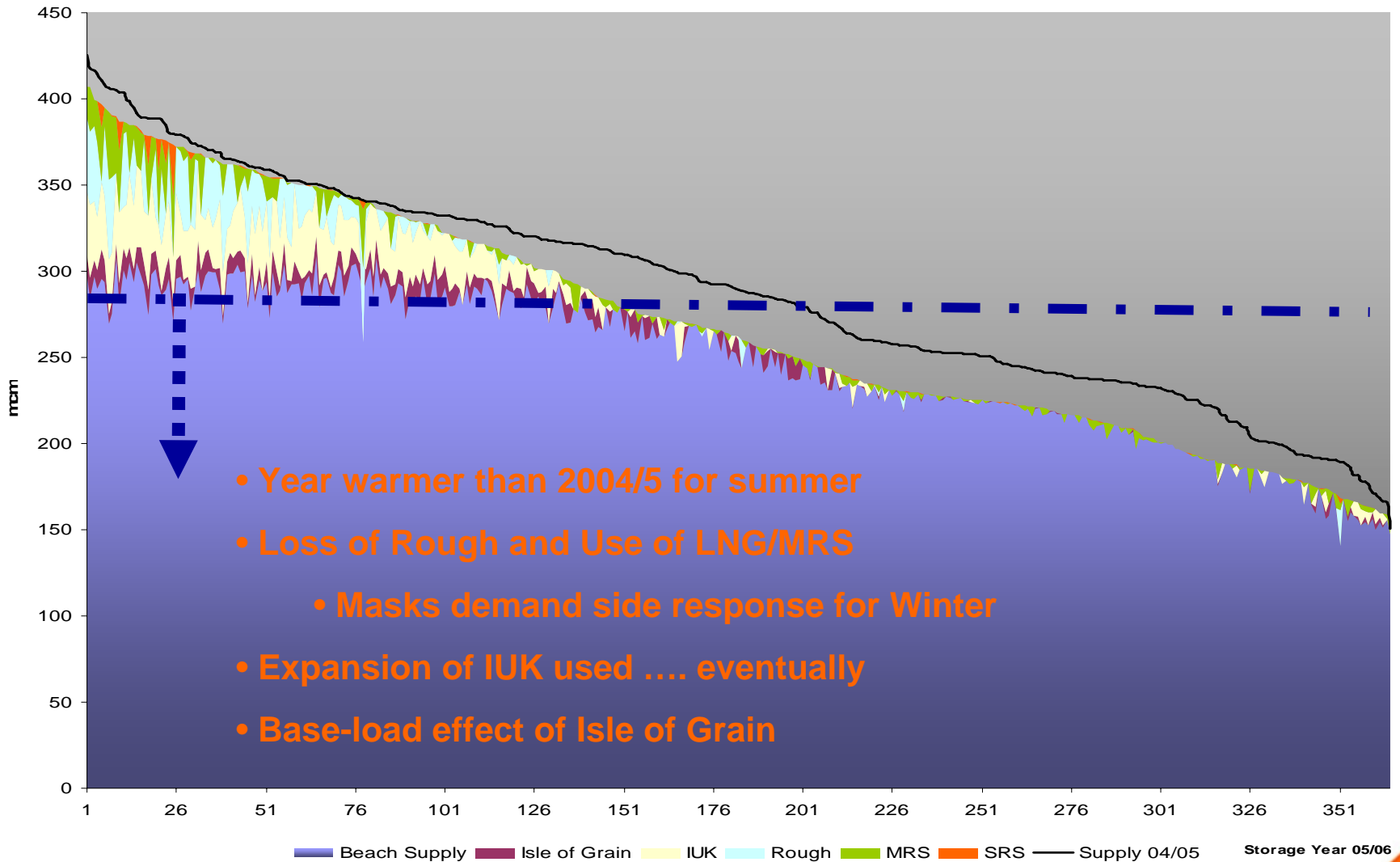
Easington Terminal

- Rough – part-depleted gas field
- Represents over 70% of UK storage by volume – new entry
- Supplies 10% of UK demand on a typical ‘cold’ winter day
- 44> mcm/day deliverability, (25 to 0.5) mcm/day injectability
- **Storage customer base utilities, traders and producers**
 - **Large end users increasingly interested in storage - diversification**

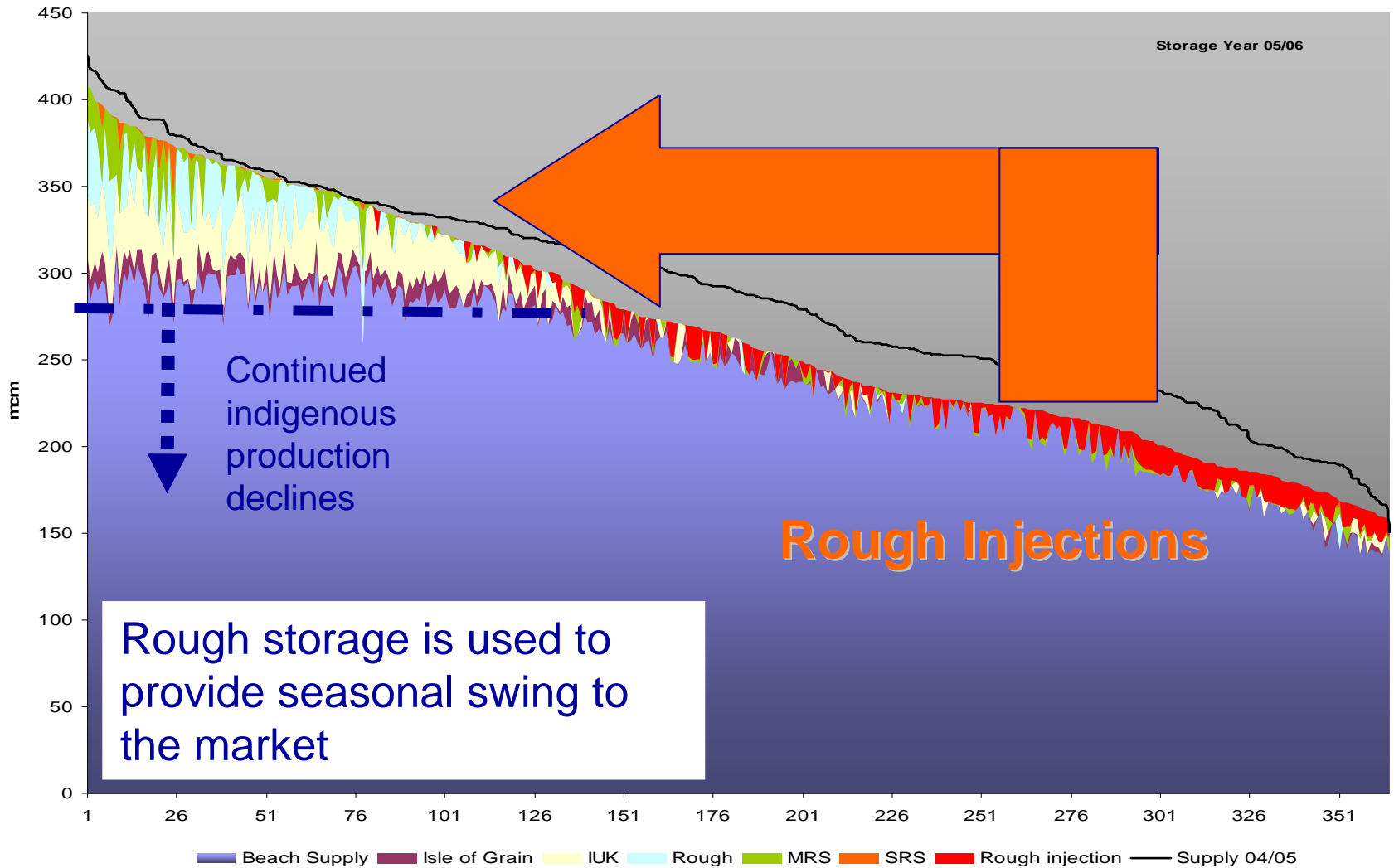
Actual GB Load Duration Curve 04/05 - warmer than average winter!



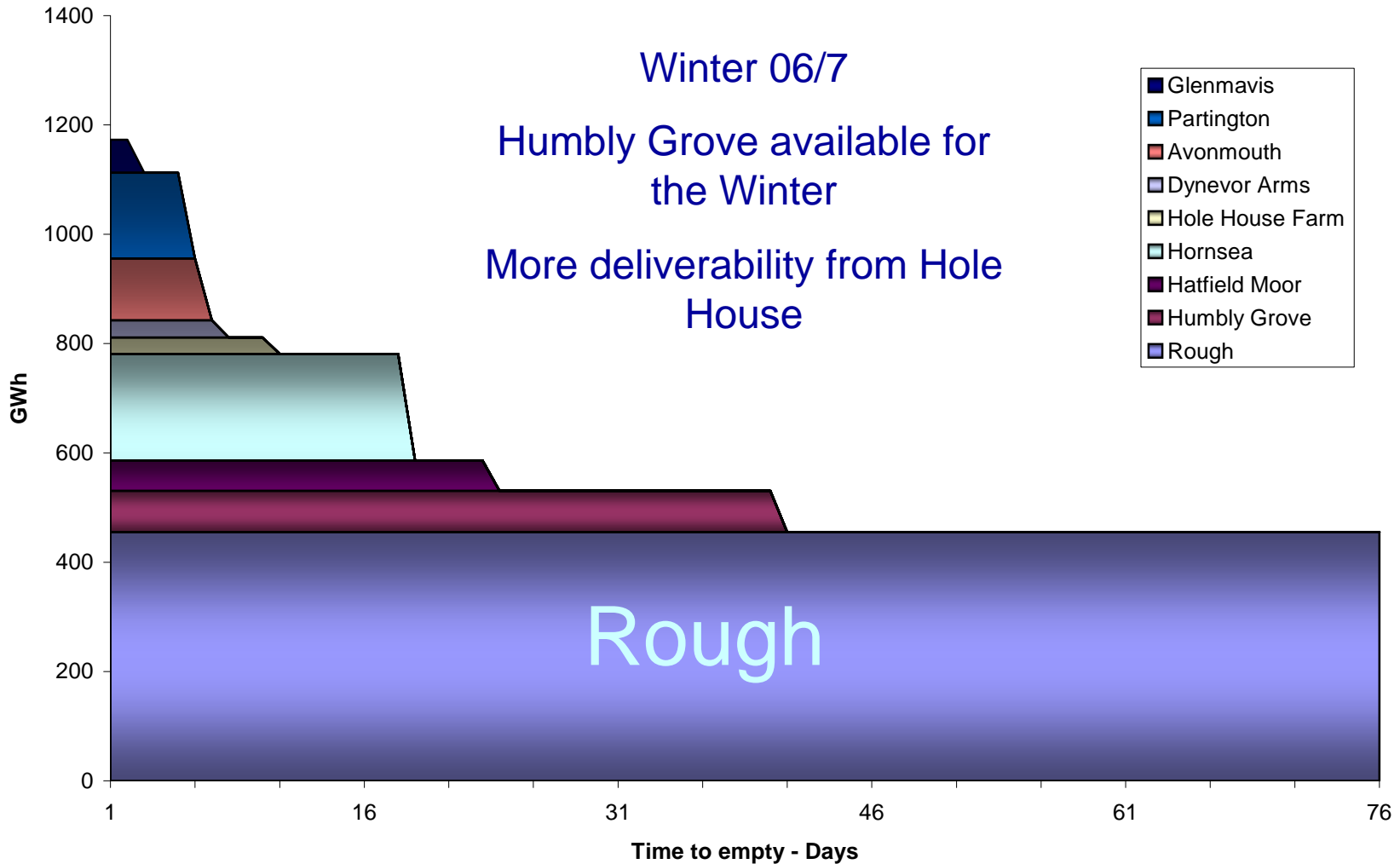
Actual GB Load Duration Curve 05/06 - again a warmer than average winter!



Actual GB Load Duration Curve 05/06



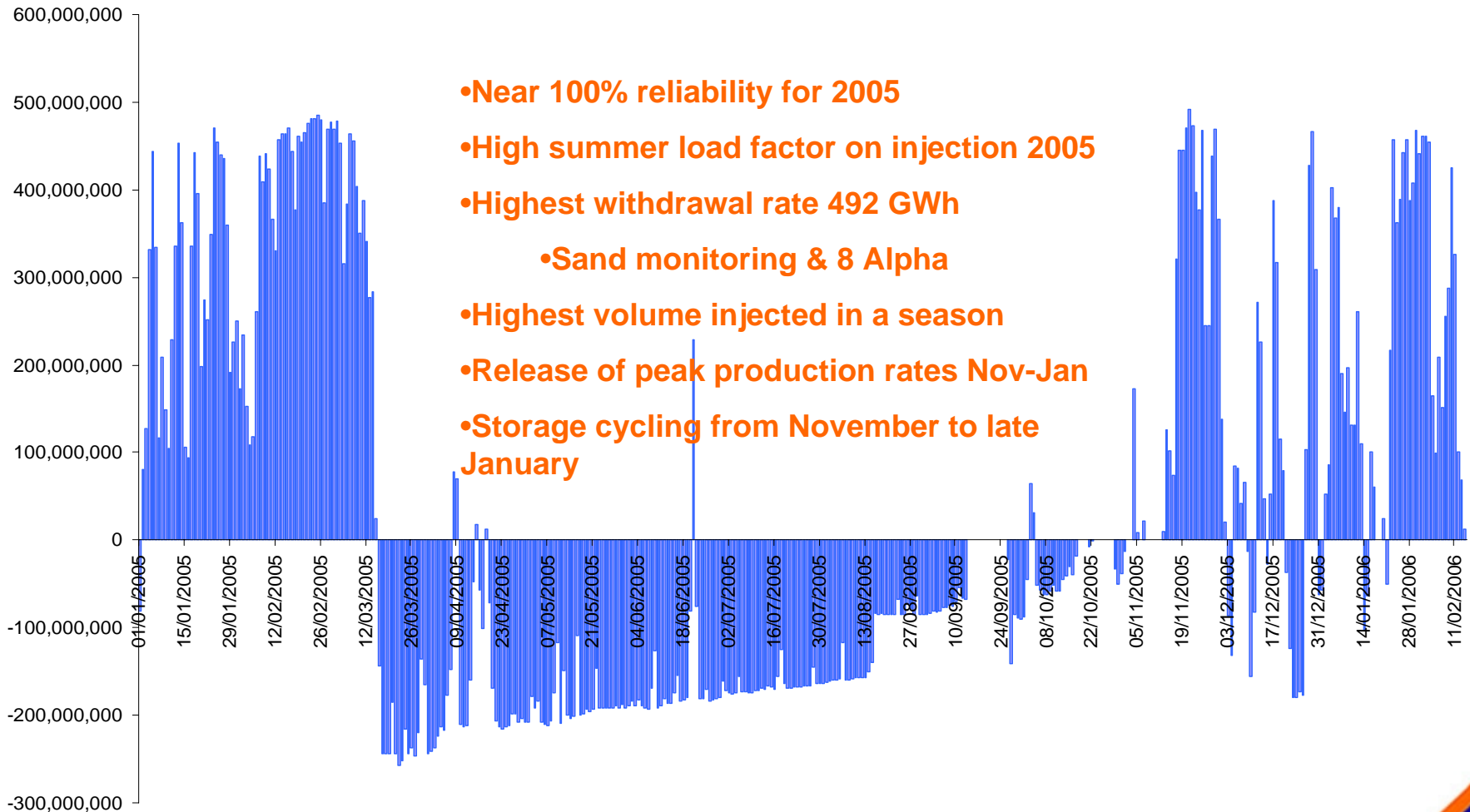
Existing UK Storage Facilities Winter 05/06



CSL – Rough Performance to Mid Feb 06

£45> million spent on Rough by CSL to date – and increasing!

Net Storage Movement



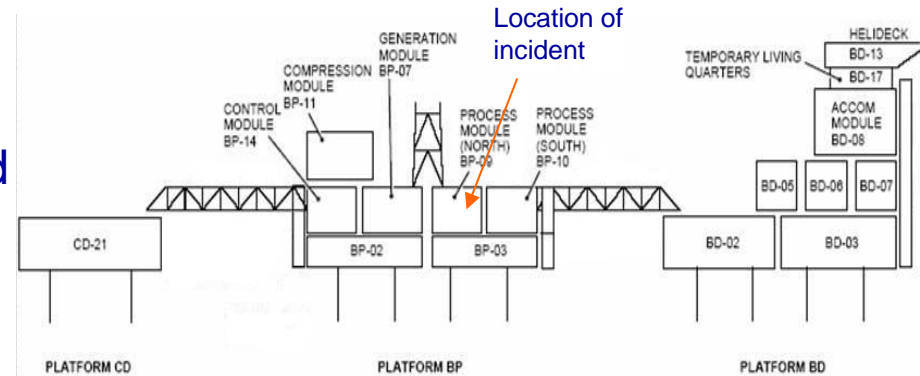
Rough incident – 16th February 2006 (1)

- Updates were issued weekly every Friday on STORIT - now moved to when new information is known
- Explosion and fire on central processing platform of main Rough complex 3B
- Of the people on board, 2 hospitalised, released by next day, others safely evacuated
- ESD and other safety systems successfully contained fire
- Apparent cause - catastrophic failure of cooler unit on one of 4 production trains – HSE safety alert issued
- Platform 3B fully re-manned from early March to enable full reconstruction, investigation and damage assessment

Rough incident – 16th February 2006 (2)

Damage Assessment

- 2 of 4 Production coolers damaged beyond repair
- Loss of power
- Significant damage (inter alia) to connected pipework, HP vent system, control and safety systems & electrical cabling.

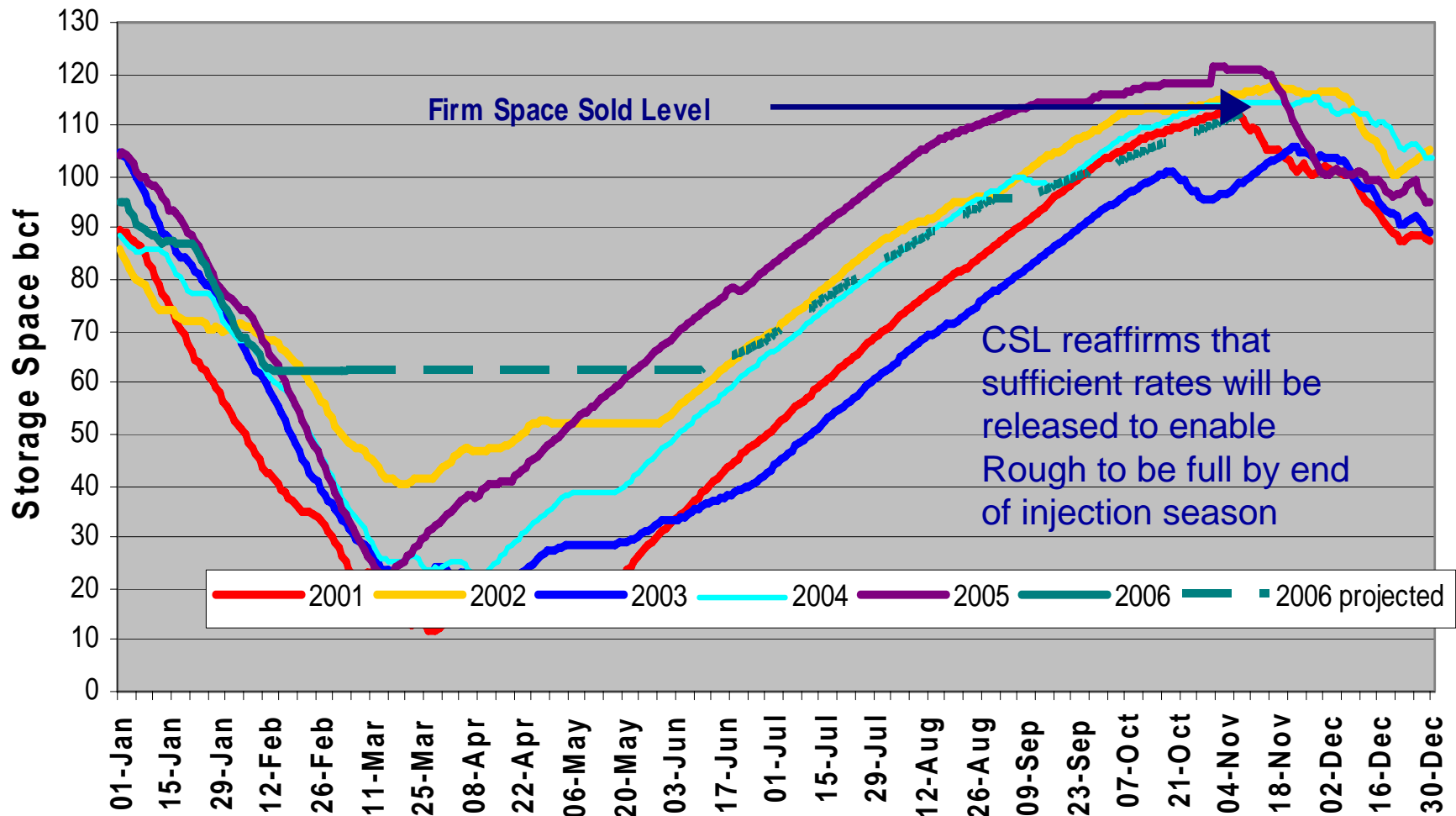


- Selected Milestones achieved
 - Restored stable power supplies
 - All 57 PSV removed for repair/overhaul
 - Injection Compressor control packages repaired and re-powered
 - All damaged structural beams replaced
 - Emergency Shutdown/Fire and Gas detection/protection systems
 - Detailed commissioning plan delivered by early June.

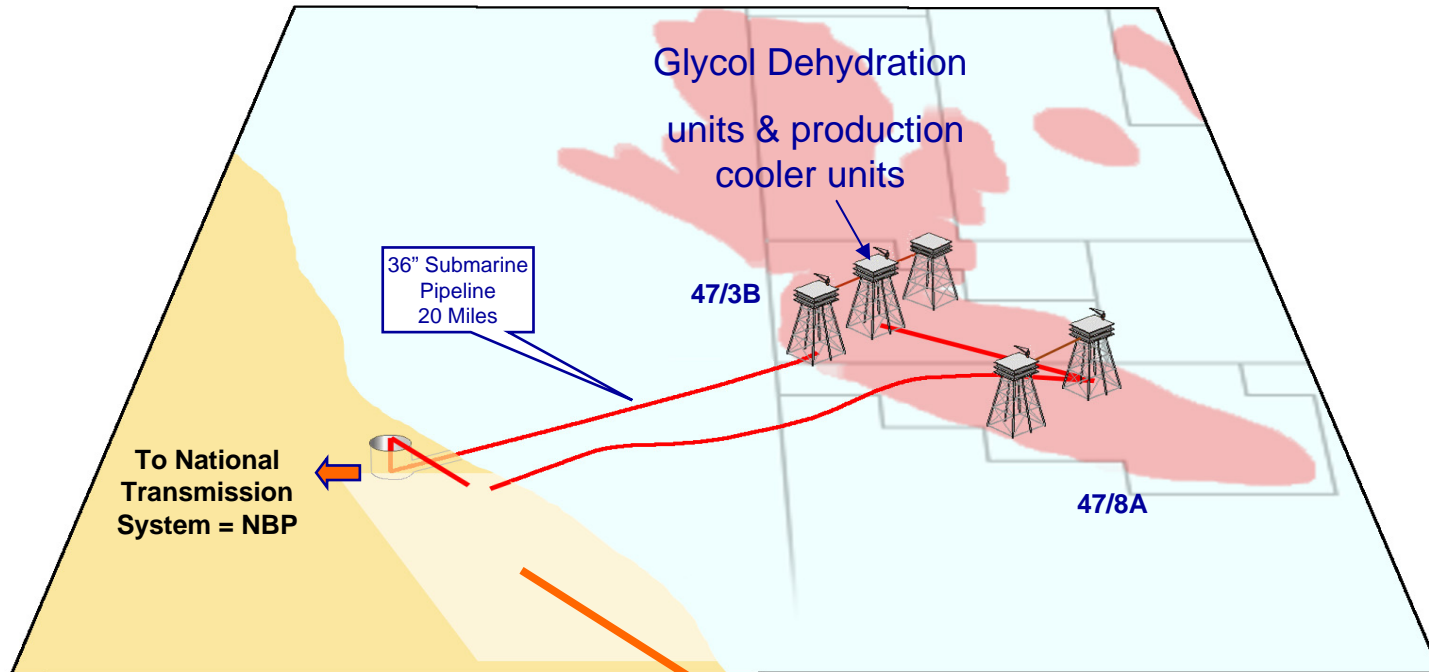
Rough currently 72% full against all space (33,220 GWh)

- FM on Injection lifted from Gas Day 18th July 2006
- Since gas day 26 June (Monday) the Rough storage facility has been operating with twin compressor operations offshore – achieving initial injection rates around 18 mcm/d for each day
- Our customers are able to nominate all of their normal injection rights
- These injection rates are above the minimum contractual injection rates required by the storage contract.
- Since the return to physical injection operations in June CSL has filled around 17% of Rough space
- At this stage our analysis suggests that there is no Further Additional Space available. This is being kept under constant review.
- Full production rates expected to be available following the return from maintenance in late September.

Stock Movements over Previous Winters Outlook for Winter 06 - Injection



Gas Production Process

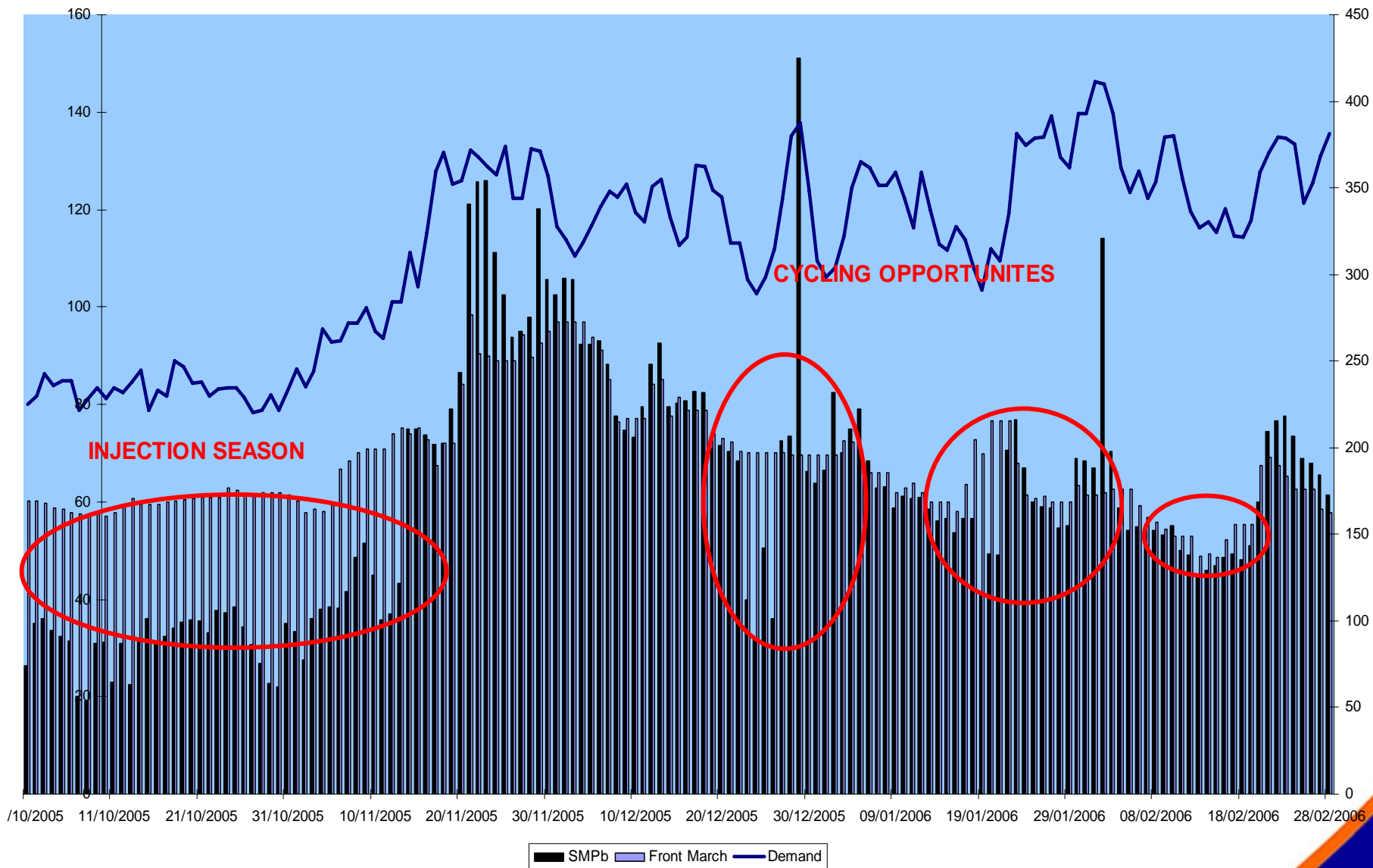


- Bypass dehydration and cooler units offshore and run 36" line to Easington Processing facility wet
- Processing onshore (remove duplication)
- Simplification of process
- Annual maintenance 7-19 September to complete restoration of withdrawal capability and install 2 re-designed & remodelled inj cooler units



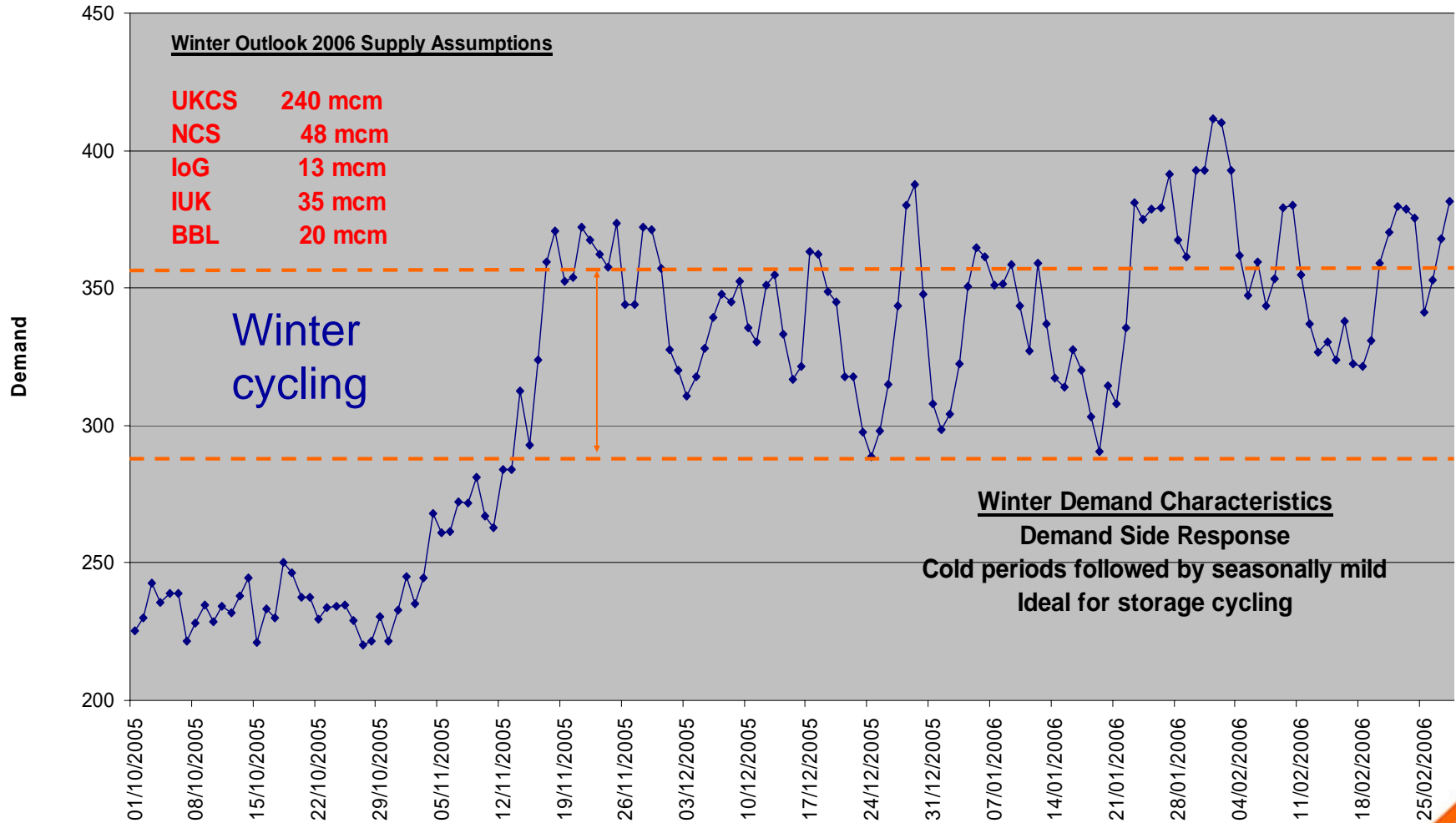
Storage Cycling Opportunities – Winter 05

Price driven



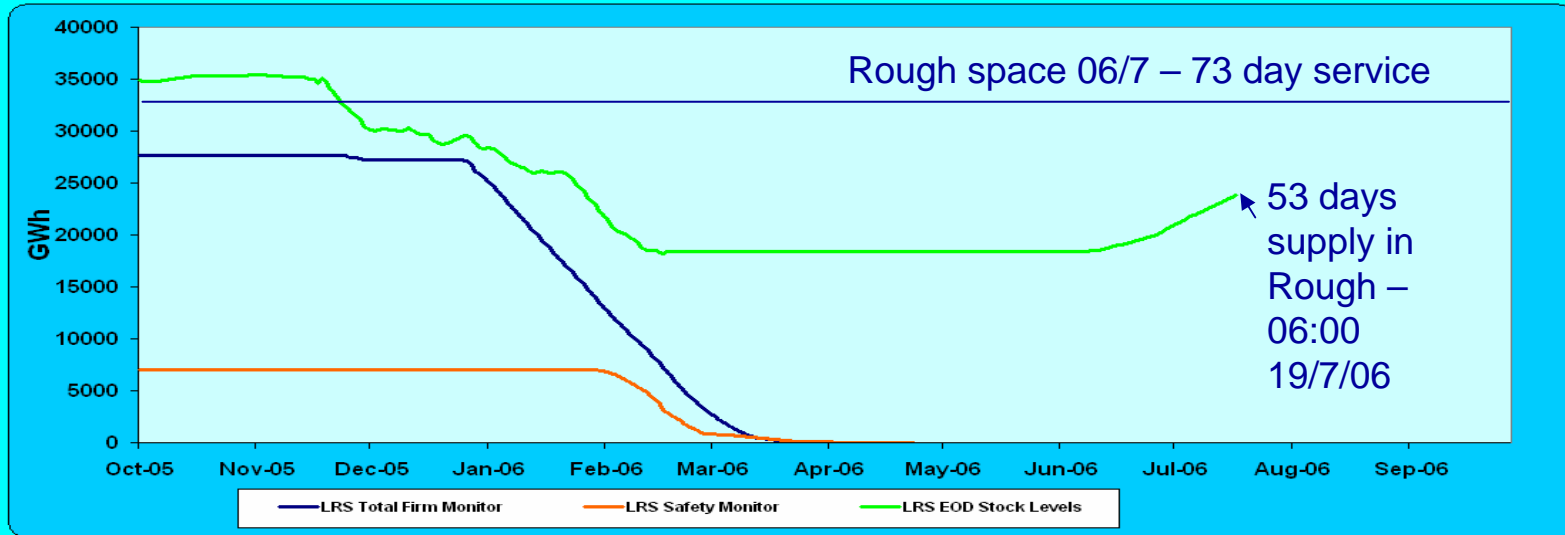
...but will the market accommodate storage cycling? Supply/demand driven

Winter Demand for Winter 05



Storage Information

LRS Storage Monitors



At 0600 hrs on :	17-July-2006	Stock Level =	23,663.3	GWh	(71.2%)
At 0600 hrs on :	18-July-2006	Stock Level =	23,849.6	GWh	(71.8%)
		Safety Monitor Level =	0.0	GWh	(0.0%)

Max Withdrawal Rate	455	GWh/day	Days before breach at Max. withdrawal =	N/A	days
7 Day Average Withdrawal Rate	0.00	GWh/day	Days before breach at Avg. withdrawal =	>100	days

- <http://www.nationalgrid.com/uk/Gas/Data/misc/>
- <http://storit.centrica-sl.co.uk> (agg site noms within day)
- CSL supportive of attempts to drive forward transparency in the UK and Europe – identify bottlenecks in a liberal market
- Transparency allows a 'controlled' use of stored stocks in UK

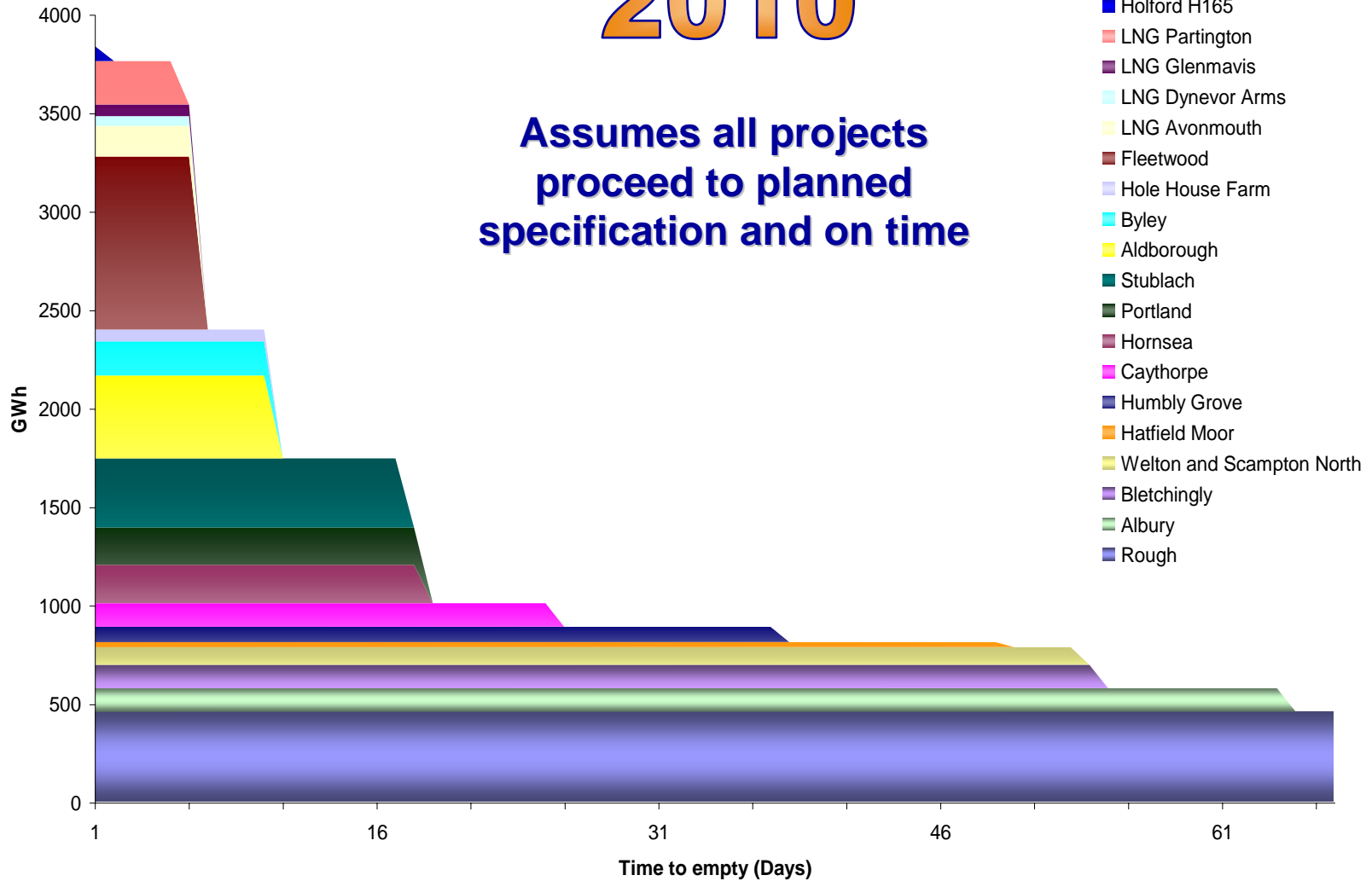
Strategic / Commercial Storage

- There are many ways to achieve Security of Supply (SOS), most notably via supply diversification and greater interconnection.
- As per the SOS Directive, we should maintain output based standards, allowing Member States and the market to deliver the most cost effective and pragmatic solutions.
- Ministerial ‘Statement of Need’ – National Interest for planning authorities welcomed
- Development of strategic stocks could lead to :
 - undermining investments in existing and future commercial storage
 - huge investments that could be used to achieve SOS more efficiently (i.e. supply diversification)
 - substantial repercussions on gas prices

GB Gas Storage

2010

Assumes all projects proceed to planned specification and on time



Summary

- Storage has a key role to play in efficient gas market and balancing
- Market responding to need for more storage - duration still an issue and but far better placed for demand/supply shocks in future
 - Subject to planning consents!
- Increased interconnection may increase the potential for storage cycling
- CSL has spent £45m> investing in Rough and plans to spend more
- CSL will continue to keep the market informed as work progresses to address the FM incident.
- Currently expect sufficient capacity will be released to fill Rough before Winter 06
- Rough storage valuation driven by observable – achievable market prices.
- Rough getting back to business as usual.

Centrica Storage Limited

QUESTIONS

www.centrica-sl.co.uk

Sales and Marketing Information/Queries:

James Lawson +44 (0) 1784 415 304

Analysis Queries:

Andrew Prangley +44 (0) 1784 415 324

Jitendra Patel +44 (0) 1784 415 339

Commercial/Operational Issues

Stuart Waudby +44 (0) 1784 415 305

Email: firstname.lastname@centrica-sl.co.uk