# Winter Outlook Consultation 06/07 27 September 2006

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#### **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**

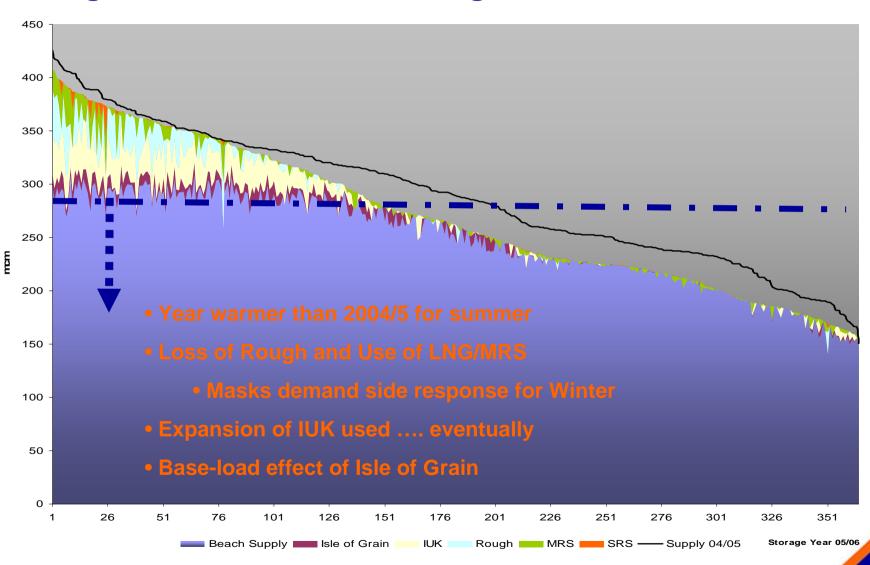




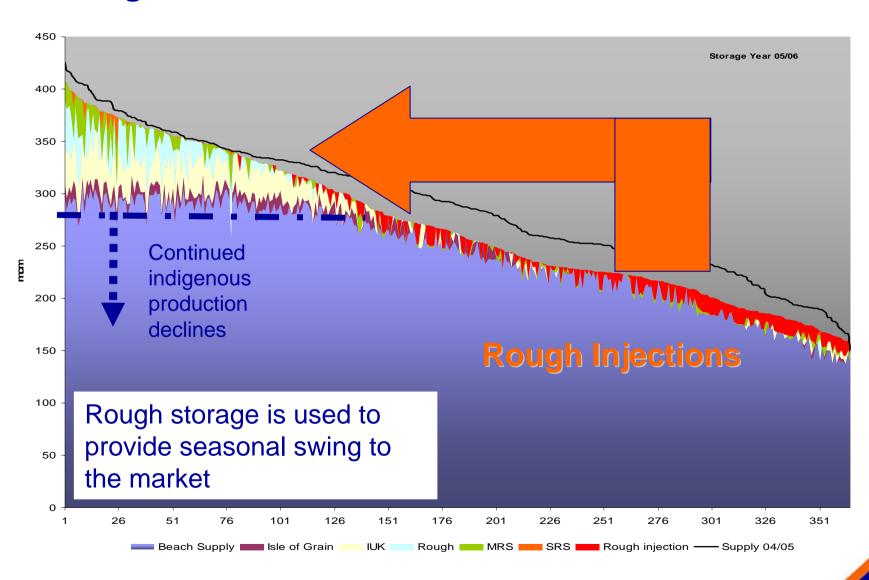
- Rough part-depleted gas field
- Represents 74% of UK storage by volume
- Supplies 10% of UK demand on a typical 'cold' winter day
- 44> mcm/day deliverability, (25 to 0.5) mcm/day injectability
- Storage customer base utilities, traders and producers - Large end users? Diversification



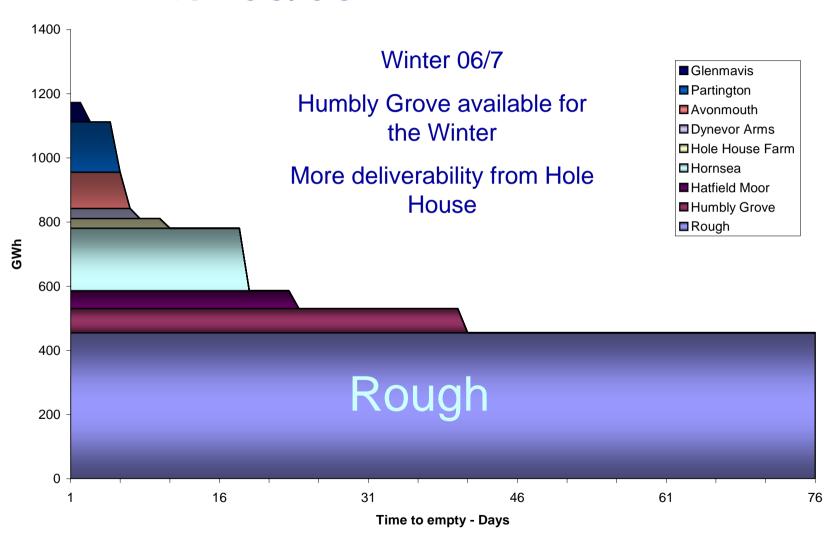
# Actual GB Load Duration Curve 05/06 - again a warmer than average winter!



# **Actual GB Load Duration Curve 05/06 – role of storage**



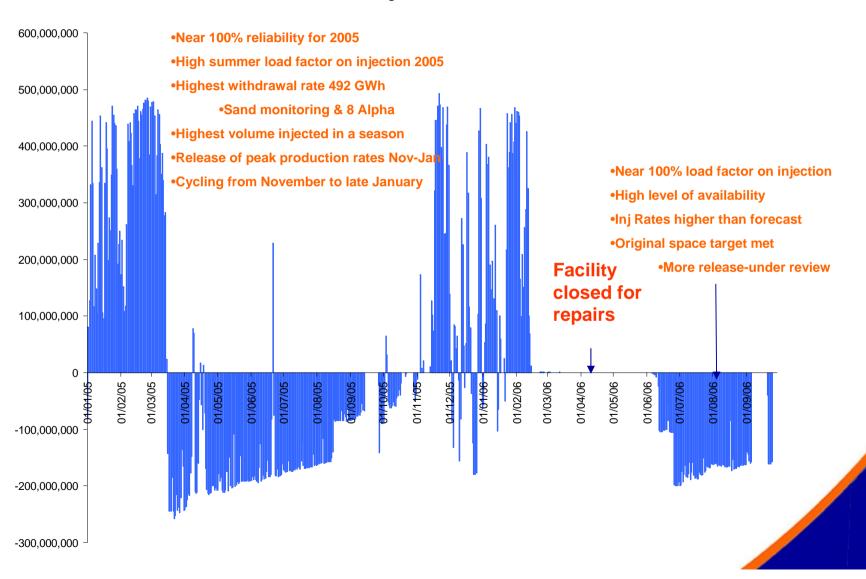
# Existing UK Storage Facilities Winter 05/06



#### **CSL** – Rough Performance to Mid Feb 06

#### £50> million spent on Rough by CSL to date – and increasing!

**Net Storage Movement** 



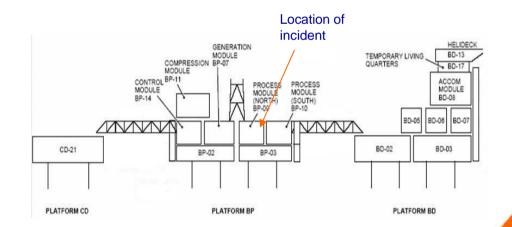
## Rough incident – 16<sup>th</sup> February 2006 (1)

#### 31 Updates were issued to all market participants on STORIT

- 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 re-construction, investigation and damage assessment

#### **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.



# Rough currently 97% full against space (33,220 + 586 = 33,806 GWh)

- FM on Injection lifted from Gas Day 18<sup>th</sup> 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 – currently 14.5 mcm
- 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 40% of Rough space
- Announcement 24 August to release more space (586 GWh or 20 m/th) of Further Additional Space made available.
- Full production rates expected to be available following the return from maintenance in late September – by 1 October at latest.
- CSL currently plans to carry out testing and commissioning flows of production.

# Stock Movements over Previous Winters Outlook for Winter 06 - Injection

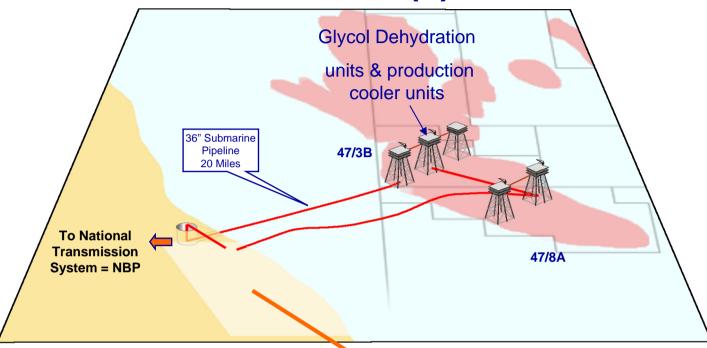


Our current analysis still suggests that it will be possible to inject at sufficient rates to enable all Rough capacity sold to be filled by the traditional end of the injection season (i.e. end—October 2006). CSL - 24 May 2006

CSL reaffirms that sufficient rates will be released to enable Rough to be full by end of injection season. CSL – July 2006 CSL is pleased to show that sufficient capacity was released to fill Rough



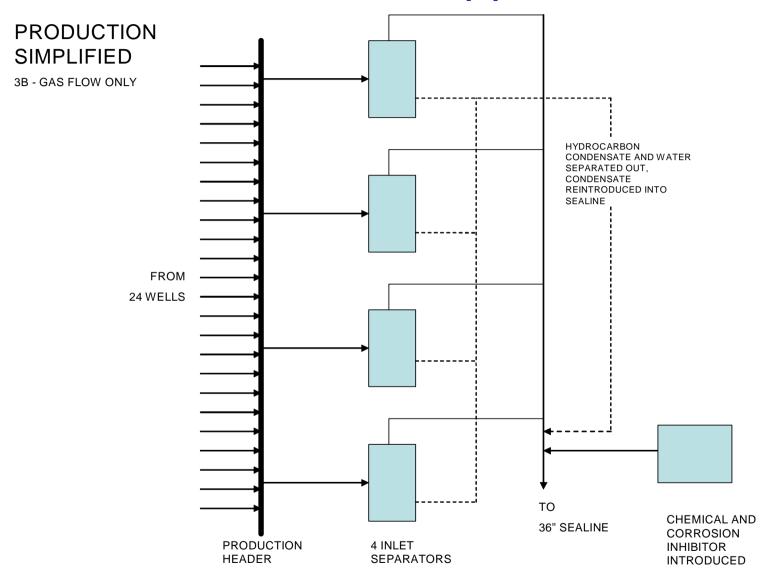
### **Gas Production Process (1)**



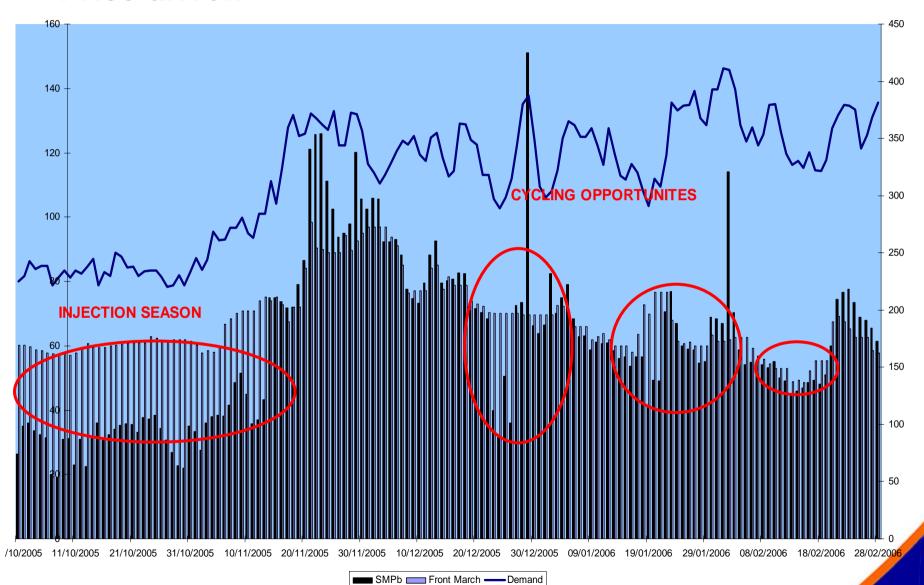
- •Annual maintenance Completed the mechanical work to restore withdrawal capability and install 2 re-designed & remodelled inj cooler units
- •Bypass dehydration and cooler units offshore and run 36" line to Easington Processing facility wet
- Processing onshore (remove duplication)
- Simplification of process (see over)



## **Gas Production Process (2)**

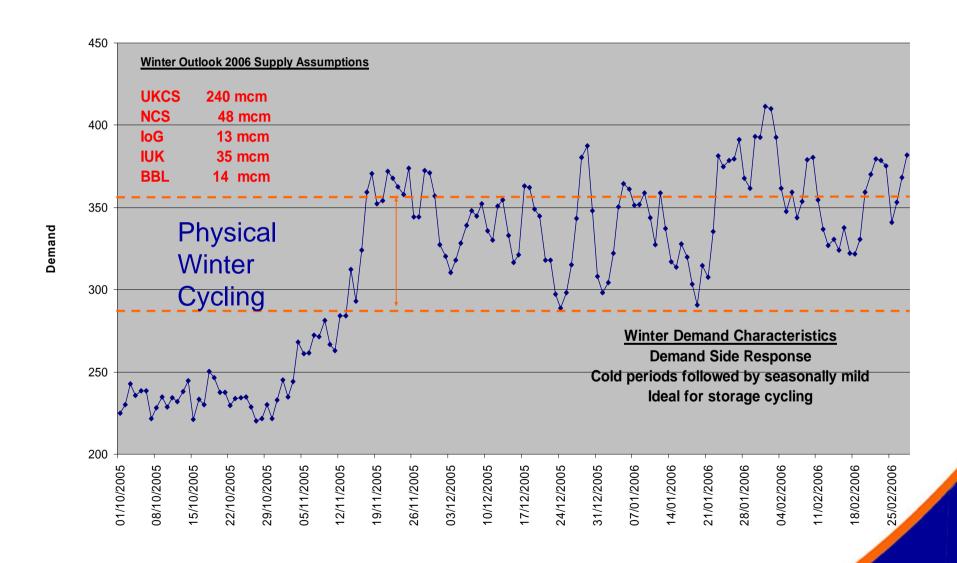


# **Storage Cycling Opportunities – Winter 05 Price driven**

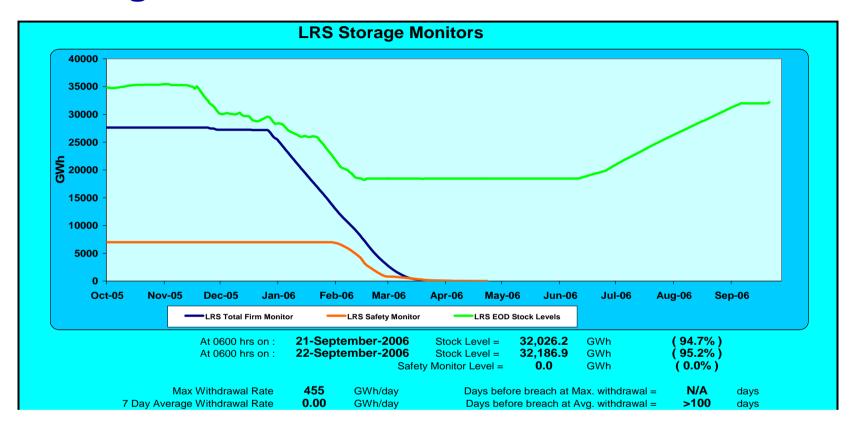


#### ...but will the market accommodate storage cycling? Supply/demand driven

Winter Demand for Winter 05

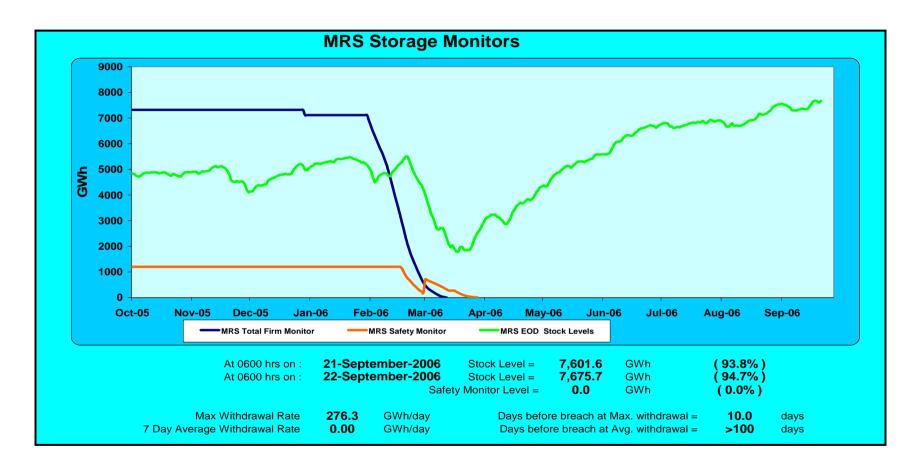


#### **Storage Information**



- •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

## **Storage Information (2)**

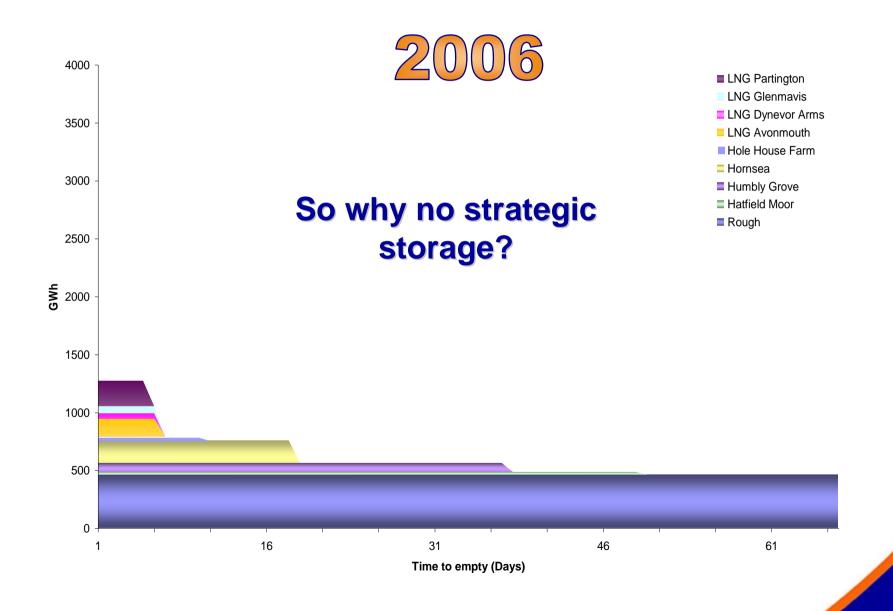


•Mid Range Storage – cycling around high volumes

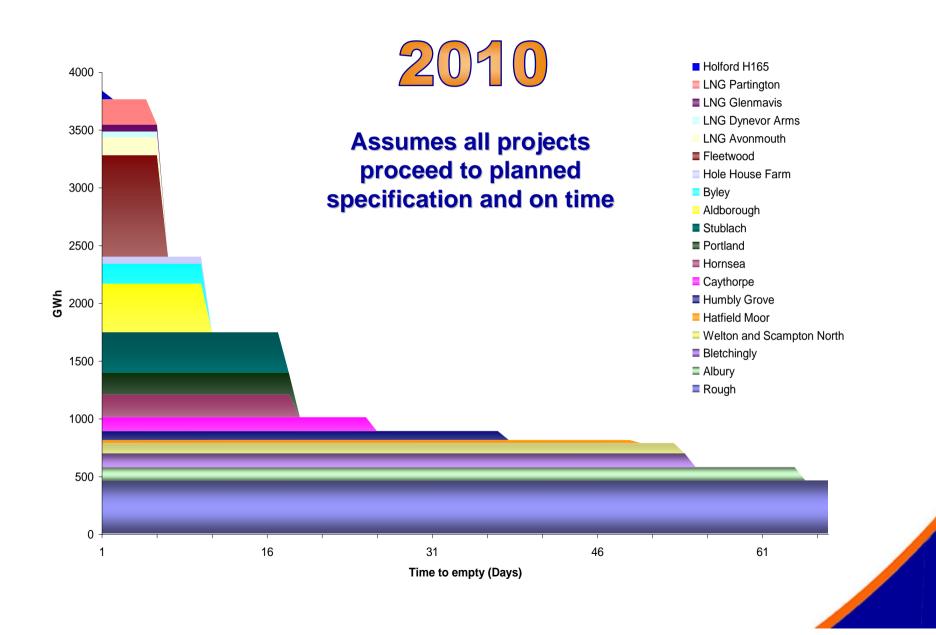
#### **Strategic / Commercial Storage**

- 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



## GB Gas Storage



# **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 £50m> 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**

Any questions...?

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