

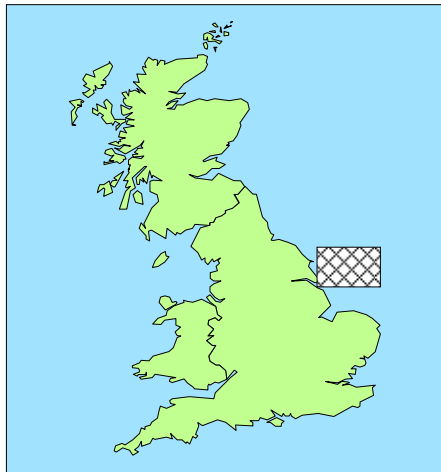
Options for Energy Buyers – Winter 2005 (and beyond...)

Centrica Storage
25 November 2005

centrica

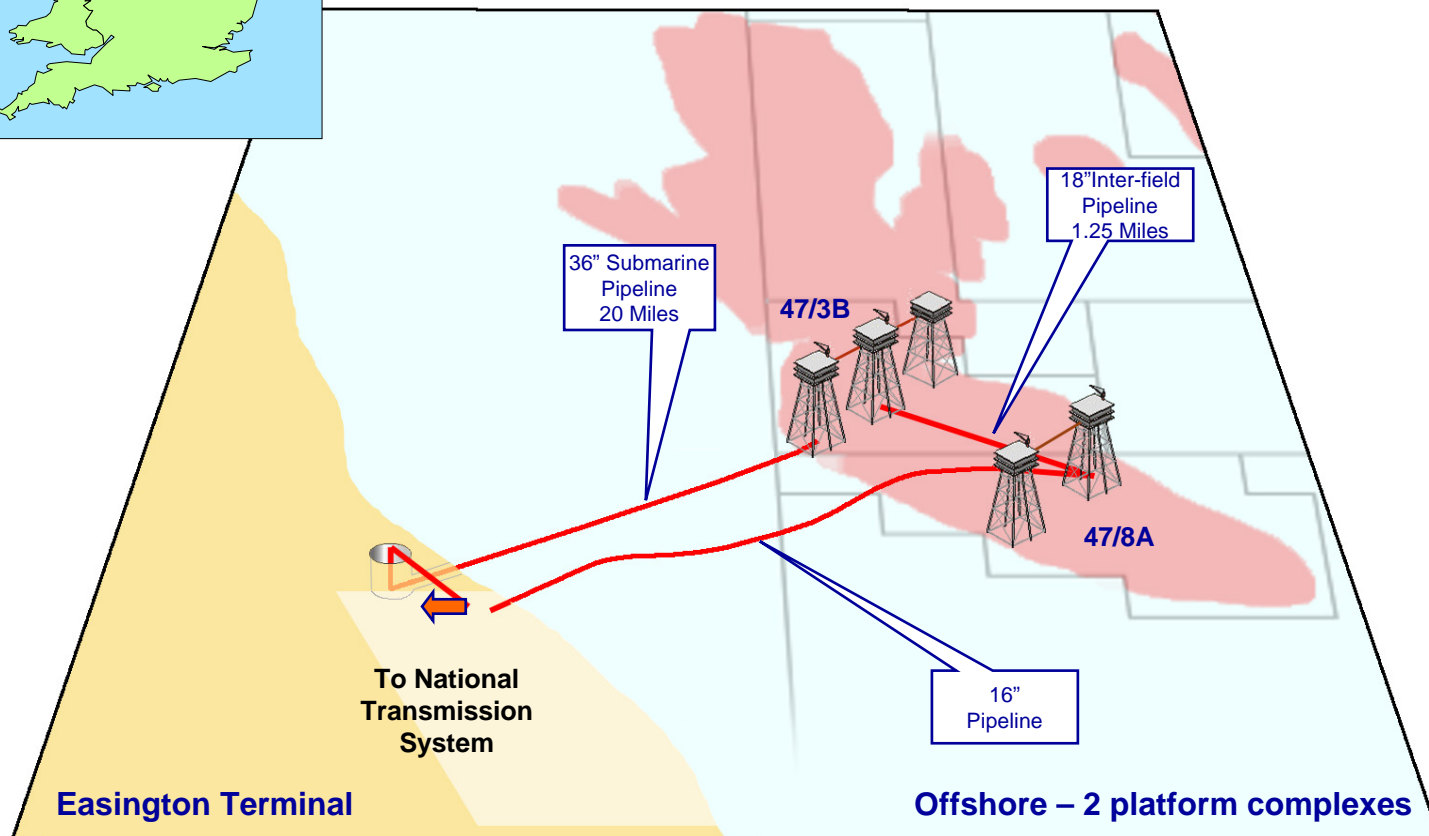
taking care of the essentials

What is Centrica Storage?



Centrica Storage Facilities

- Offshore – Rough: 20 miles off Yorkshire coast.
- Easington Terminal for Rough, and third party gas processing.
- Commercial team: office in west London



Introduction to Centrica Storage



Offshore – 2 platform complexes



Easington Terminal

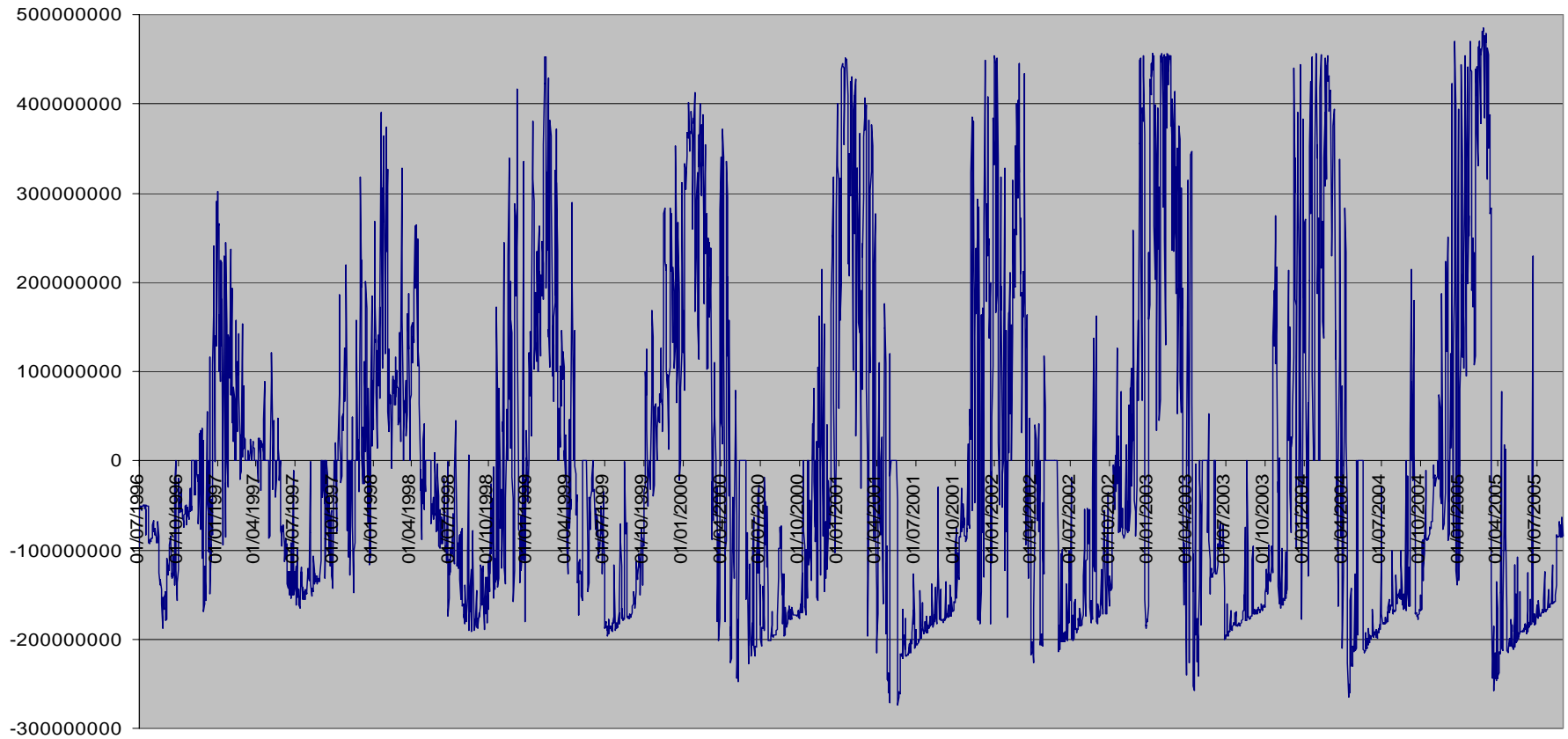
- Rough – part-depleted gas field
- Represents over 70% of UK storage by volume
- Supplies 10% of UK demand on a typical 'cold' winter day
- 44> mcm/day deliverability, (25 to 0.5) mcm/day injectability
- **Storage customer base currently utilities, traders and producers**

Rough 2005 Performance Analysis

- Production
- Space
- Injection
- CSL Rough investment and enhancement programme
- Observations for Winter 2005
 - Rough is as full as the reservoir will allow
 - Therefore duration of storage increased (even without storage cycling – more on this later...)
 - Delivery rates at their highest

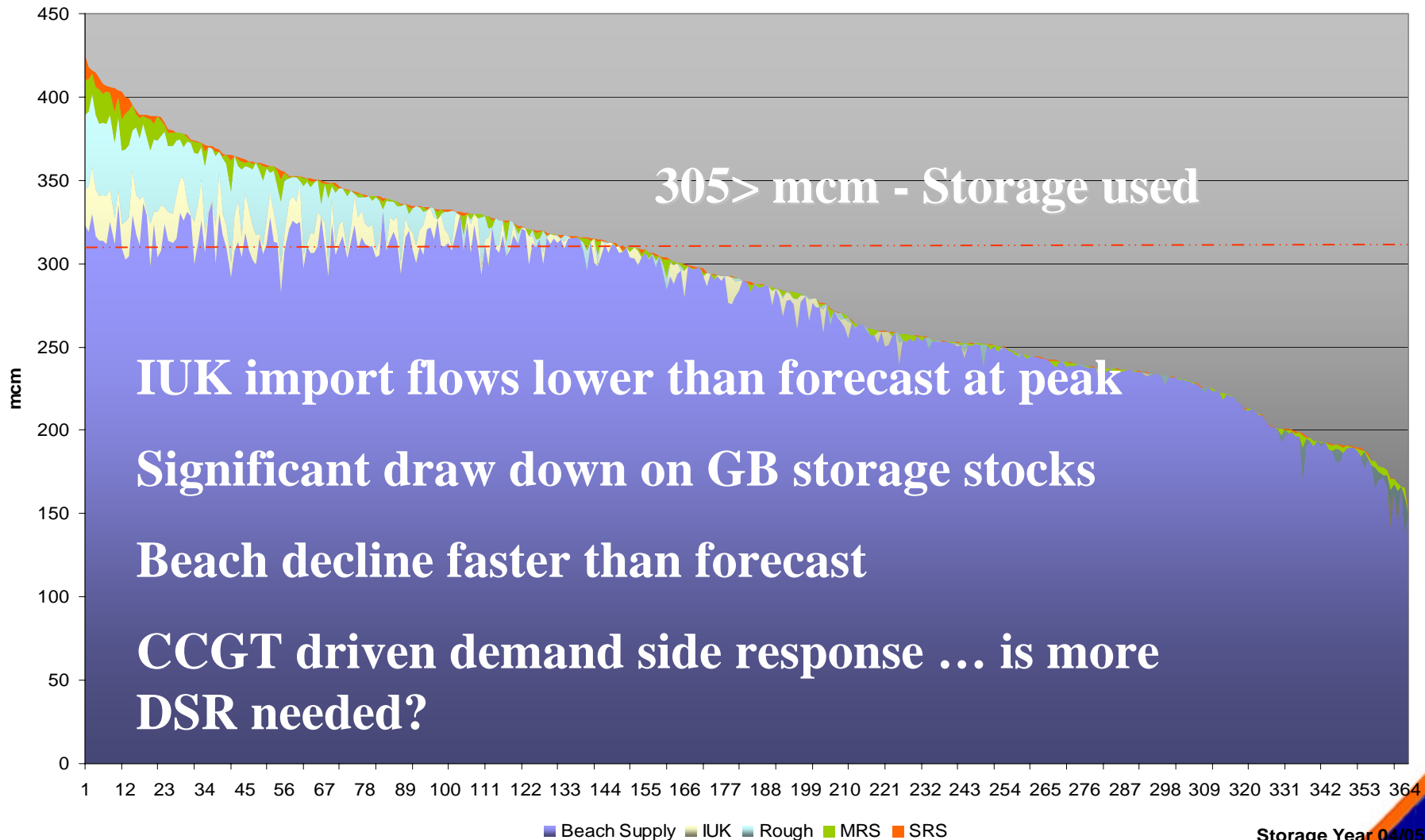
Increasing use of Rough Storage

Net Physical Rough Stock Movement



Source: Previously AT Link – now web enabled
So how important is storage to balancing in Winter

Actual Load Duration Curve 04



Operational Information – the within day debate

- Shipper v's Energy Buyer knowledge within day?
- Release of web enabled 'timely' information to the market
- Is real time information the answer....?

“The information is out there.....”



- **OPTIONS FOR ENERGY BUYERS (1) – USE STORAGE INFO**
- Aggregate Site Nominations within day
- Physical stock movements for every day this winter after the gas day for each storage type
- Other storage sites...
- Information public section on STORIT – ad hoc bulletins



Centrica Storage Bulletin

Aggregate Site Nominations

Centrica Storage

Published: 05.11.2005 18:00

Before The Gas Flow Day

06.11.2005 - 16:00 D-1

Facility	Injections (kWh)	Withdrawals (kWh)
ROUGH	1,643,927	0

During The Gas Flow Day

05.11.2005 - 12:00

Facility	Injections (kWh)	Withdrawals (kWh)
ROUGH	1,717,778	20,401,276

During The Gas Flow Day

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05.11.2005 - 18:00

Facility	Injections (kWh)	Withdrawals (kWh)
ROUGH	1,717,778	7,200,451

End of Bulletin

Centrica Storage Bulletin

Aggregate Site Nominations

**Max = DIAF
X 160 GWh**

**e.g. DIAF for 6
Nov = 0.025 x
160 = 4 GWh
of capacity
released**

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**Contractual
max to 31
January 472
GWh**

**From 1st Feb
455 GWh**



Centrica Storage Bulletins

Public Bulletins

Private Bulletins

Enter Bulletin

Edit Bulletin

Centrica Storage Bulletin

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End of Bulletin EOD at 18:00 = 5.5 GWh withdrawal (0.5 mcm on PCLP)

Centrica Storage

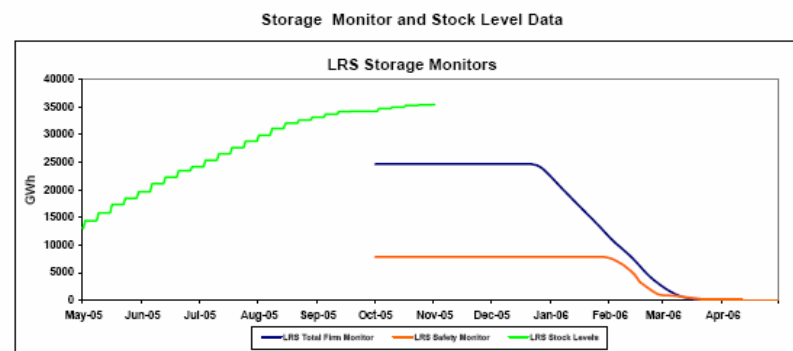
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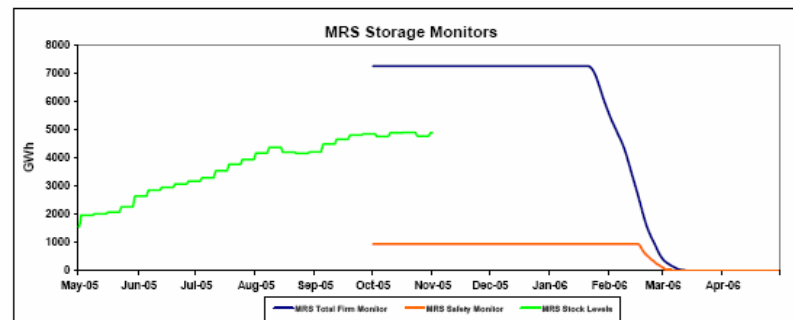
**From 1st Feb
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Long Range
Rough – 31
Oct = 35,439
GWh

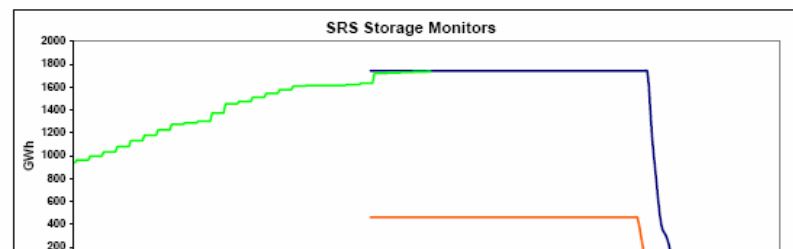
Short Range Transco LNG



LBS Stock level at 0600hrs	31-Oct-2005	=	35.439	GW
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MRS Stock level at 0600hrs	31-Oct-2005	=	4.879	GW
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Medium Range

Hornsea

Hole House

Hatfield Moor

Humbly Grove

System Information

- Add these sites to your 'favourites'
 - <http://www.nationalgrid.com/uk/Gas/Data/dsr/> (Information on the system)
 - <http://www.nationalgrid.com/uk/Gas/Data/misc> (Storage Monitors)
 - www.centrica-sl.co.uk (back ground info)
 - <http://storit.centrica-sl.co.uk> (storage information)
- Any company signing our contract (SSC) and Credit Agreement get full access to STORIT (no obligations attached)

Centrica Storage Customer Access System

- Nominations
- Capacity Management
- Inventory & Allocation
- Billing
- Centrica Storage Bulletins
- Bulletin Board
- Administration



Centrica Storage is the leading supplier of physical gas storage services in the UK.

The Rough facility is a partially depleted gas field supplied from Easington terminal offering flexible deliverability from a large storage volume.

The STORIT system provides the connection between Centrica Storage and its customers for operational communications. Customers should call the Duty Commercial Officer on +44 (0) 1784 415 301 for advice on any aspect of Centrica Storage services.

Applies the SSC in a user friendly way!

OPTIONS FOR WINTER 2005 (2) – USE ROUGH

- **Agree credit and your company can access Rough storage services**
- **SECONDARY capacity available**
 - **CSL WILL facilitate secondary trading of capacity**
 - **There are always sellers!**
- **INTERRUPTIBLE capacity offers**
 - **CSL WILL release all available capacity to the market**
 - **CSL WILL make space zero price from January 2006 to enable storage cycling**

OPTIONS FOR FUTURE WINTERS

- **FIRM capacity offers for future years**
 - **Choice of fixed or indexed prices, single or multi year**
 - **Or access to short term interruptible capacity**
 - **Third Party Capacity (i.e. Non Centrica)**

Technical Capacity = 455 m/SBUs

- **2006/7 – 373.1 m/SBU (75%> sold out)**
- **2007/8 – 377.7 m/SBU (20%> sold out)**

Centrica Storage Limited

WHY SHOULDN'T LARGE GAS USERS BUY STORAGE CAPACITY..?

QUESTIONS...?

www.centrica-sl.co.uk

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Analysis Queries:

Andrew Prangle +44 (0) 1784 415 324

Jitendra Patel +44 (0) 1784 415 339

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