Promoting choice and value for all gas and electricity customers

Looking ahead to Winter 2006/07

Sonia Brown

Director, Wholesale Markets, Ofgem

First phase of Winter Outlook – thanks to all respondents...

aep Association of Electricity Producers
centrica storage
British Gas centrica
Scotia Gas Networks plc
CHEMICAL INDUSTRIES ASSOCIATION
British Energy
Environment Agency
BG GROUP
EDF
Gaz de France
MINESCO
Met Office
Shell
TOTAL
Northern Gas Networks
UKOOA oil and gas for britain
energywatch
Global Insight
npower RWE Group
International Power
Scottish and Southern Energy
British Nuclear Group Intelligent nuclear clean-up
INEOS Chlor
e.on UK
nationalgrid
STATOIL
ScottishPower
WALES&WEST UTILITIES
ALCAN
SEPA Scottish Environment Protection Agency
WARWICK ENERGY

Winter 2005/06 – a challenging time for customers


ENERGY Users demand that National Grid be given control of spare capacity on the pipeline linking the

Where's the gas?

Scandal of the half-empty Interconnector

By Tim Webb

Leading manufac... that energy pr... forced up t...

in the rest of Europe – the pipeline has only been operating at half capacity this winter.

The Energy minister, Malcolm Wicks, has called for an inves-

Jeremy Nicholson, the director of the Energy Intensive Users Group, said that Nation... which balances electri... ply and demand, shou...

Gas price hikes set to lessen

GAS CRISIS COULD HIT MILLION JOBS

Record Winter bites

HARD-PRESSED householders are going to be squeezed for even more cash by utility companies.

Gas giants warned over supply fiasco

Gas crisis could leave economy 'at risk'

Outlook for this summer - gas?

- Continuing decline of UKCS
- May need to rely on imports or higher priced sources of supply
- Rough injection underway
- Potential for further constraints on NG’s system?

Potential remains for summer supplies to be tight

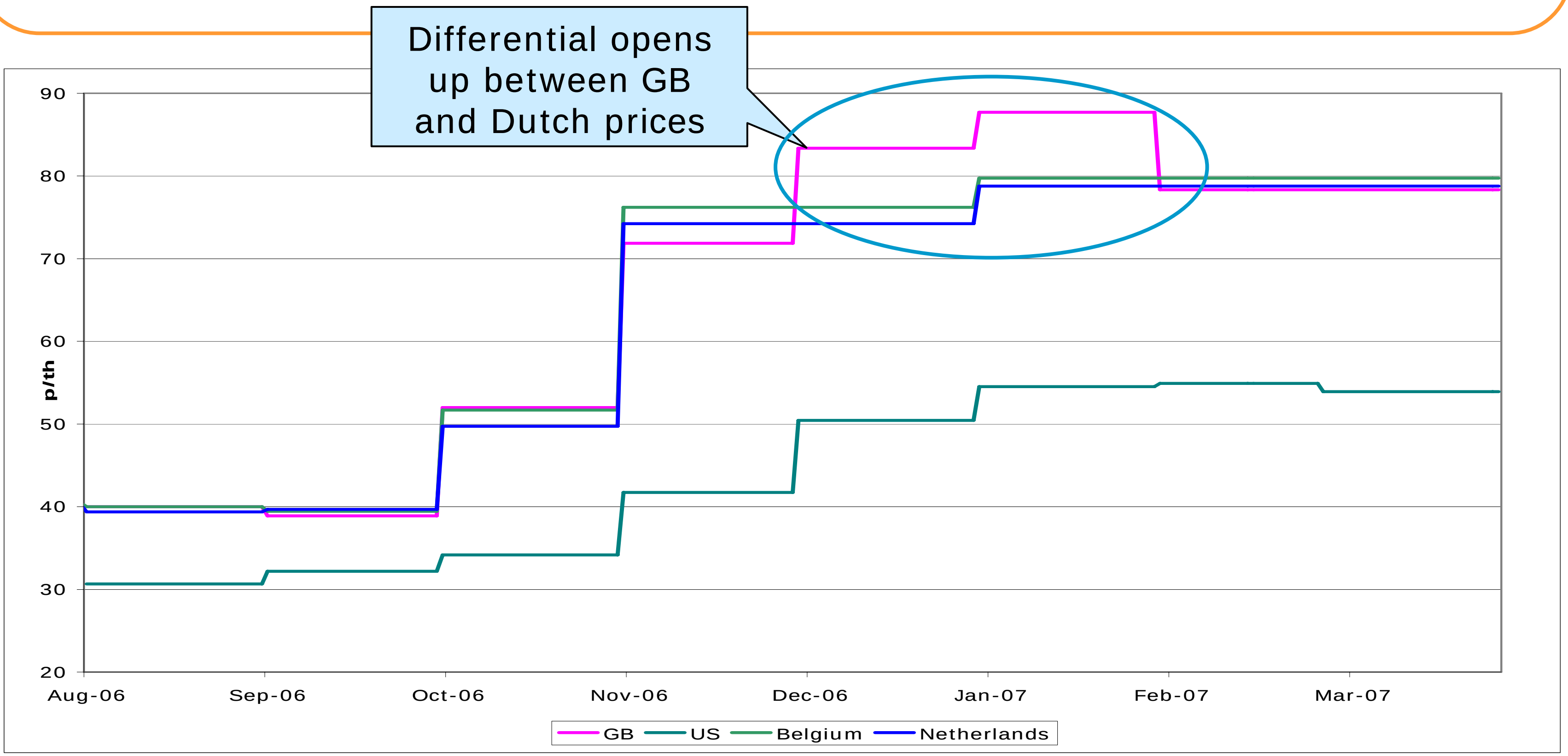
Outlook for this summer - electricity?

- Summer maintenance and high temperatures
- Could lead to tight supply/demand conditions
- Demand control imminent notice issued on 18-Jul

Potential for further tightness over summer?

Promoting choice and value for all gas and electricity customers

Wholesale gas market expectations



Gas forward prices

Winter 2006/07 – update on key gas issues

UKCS	• HSE enquiry – South Morecombe only platform affected • UKCS supply forecasts in line with TBE
Rough	• Injection underway - on track to be full for winter • Risks to injection remain?
IUK	• European flows? • WOR feedback: will capacity = gas?
New imports	• BBL / Langeled / Excelerate / IUK upgrade • Construction risks?
Demand	• Customers appear responsive to price • Gas electricity interactions still likely to be key

Split Winter...

November

- Langeled on stream from October
- but limited (if any) increase in flows through IUK

December

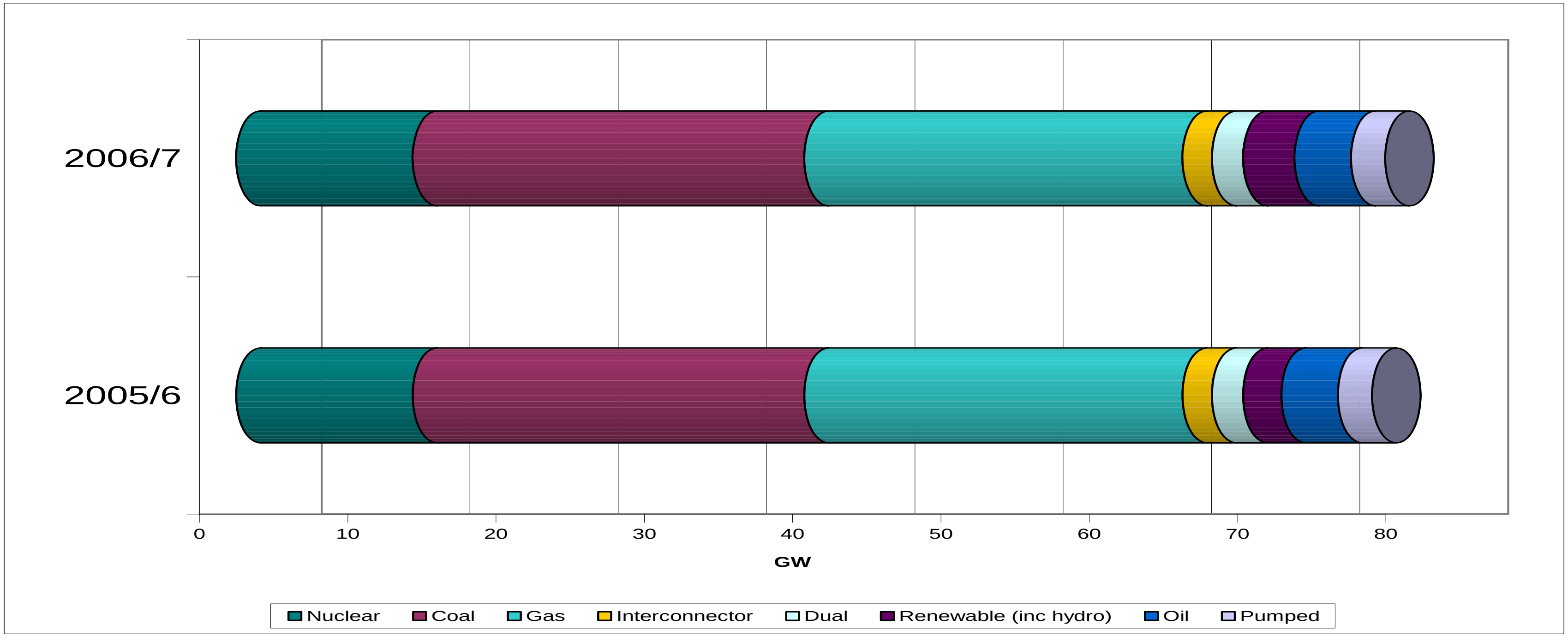
- BBL
- IUK enhancement
- Gasport?

Like last winter storage cycling is likely to be important

March

- BBL enhancement...
- But what will the storage position be?

Winter 2006/07 – electricity

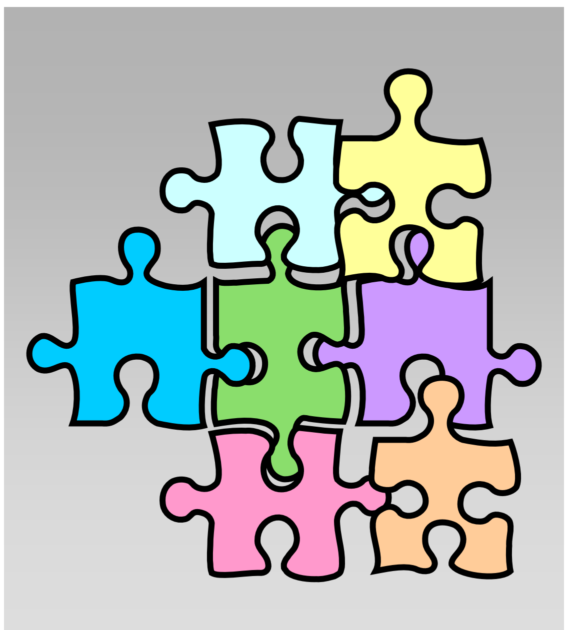


Margin projected to remain healthy

Interactions with gas market and carbon important

European picture

Transparency is an issue...



Experience of Winter 2005/06

➢ Difficult to understand flows from Europe

Ofgem has met with:

➢ EU Commission

➢ Key companies

Information key to build better understanding of Europe picture

➢ Enable market to develop own views on likely scenarios

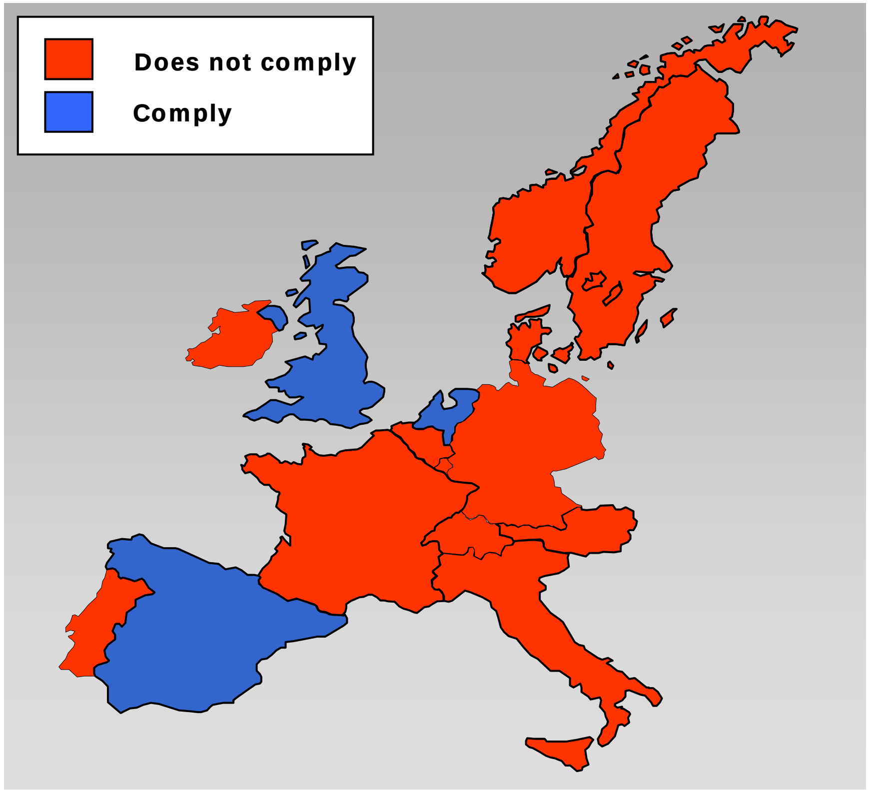
Transparency in Europe

Gas regulation 2006

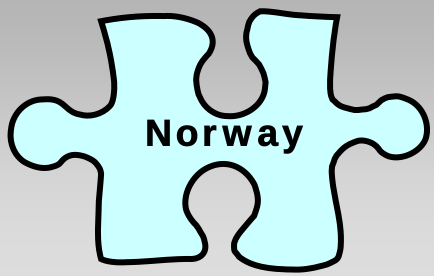
- New requirements on publication of information

- Publish information on available capacities
- Clear and meaningful
- Accessible to all

- ERGEG review of all transparency requirements Q2 2006



Norwegian picture



Winter 2005/06

- Offshore reliability overall very high

But…

- Continental contracts given priority over flows to GB

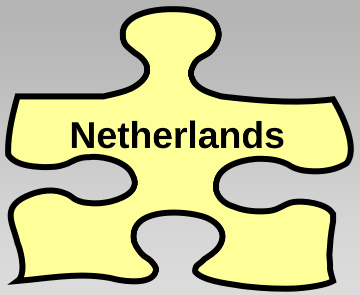
Winter 2006/07?

- No new gas but Langeled removes transportation constraint – more gas during peak winter months?
- Potential for exports to be constrained – gas quality issues?
- Langeled – new gas or diversion of existing gas?

Beyond 2006/07?

- Snohvit LNG export terminal expected 1 Dec 2007
- Increased production capacity - Troll field, start of Ormen Lange

Dutch picture



Winter 2005/06

- Capacity constraints limited flows to German – Belgian border
- No reverse flow at Zelzate – can only reduce imports

Winter 2006/07?

- BBL pipeline on target for Dec 06 – 2nd phase Mar 07
- New gas or diversion of existing gas?
- Dutch I&C and power stations short of gas – compete with GB?

Beyond 2006/07?

- Compressor at Zelzate will enable reverse flows by 2008
- GWWL pipeline – increase East-West flows

Belgian picture

Winter 2005/06

- Gas quality/protecting storage
  - limiting flows?
- I&C customers interrupted during cold snap

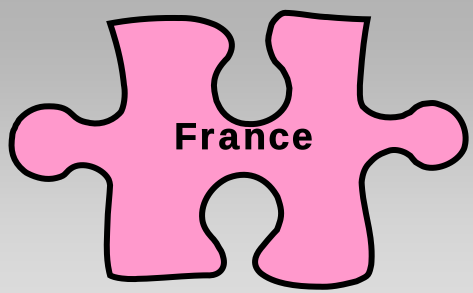
Winter 2006/07?

- IUK upgrade – on track for 1 December
- Potential for exports to be constrained – gas quality/capacity issues? ***Still awaiting info from Fluxys***
- Limited storage and need to maintain stocks
- LNG supplies impacted by end of Algerian supply contract?

Beyond 2006/07?

- Investment to increase supplies form Germany, Netherlands and LNG

French picture



Winter 2005/06

- New LNG supplies from Egypt
- Loss of Algerian LNG supply
- I&C customers interrupted during cold snap

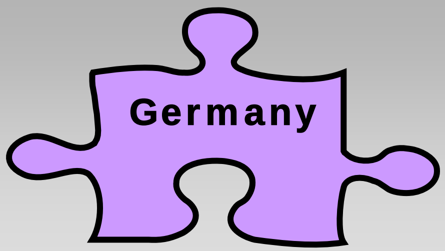
Winter 2006/07?

- New LNG terminal at Fos Cavaou (8.25 bcm/an)
- Storage stocks preserved in early winter?
- Improvements to transparency of storage stocks

Beyond 2006/07?

- Fourth LNG terminal at Le Verdon (2010+, 2-3 bcm/an)

German picture



Winter 2005/06

- E.ON exhausted storage stocks
- First interruption of I&C customers
- Lack of transparency

Winter 2006/07?

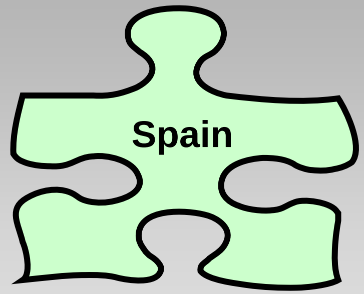
- Stegal capacity upgrade – increased by 50% to 6bcm/year
- Large storage capacity = 20% annual demand…

…39% owned by small municipalities – no PSOs but will they behave commercially?

Beyond 2006/07?

- Northern Gas Pipeline linking the Baltic coast with Russia (2010)
- Pipeline linking Austria and France – free up capacity for GB flows?

Spanish picture



Winter 2005/06

- Problems with Algerian pipeline supplies – customers interrupted
- Govt plan for winter energy supplies
  - 2 LNG tankers moored offshore Dec-Mar
  - Restrictions on use of storage
  - Cash out interactions - LNG

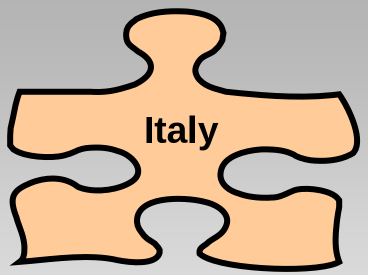
Winter 2006/07?

- New winter gas supply plan?
- New supplies - Egypt and Trinidad & Tobago

Beyond 2006/07?

- Medgaz pipeline expected online 2009
- Fourth storage tank at Catagena terminal expected 2008

Italian picture



Winter 2005/06

- Demand 7% higher since winter 2004/05
- Cold snap - unwillingness to access strategic stocks…
- Led to government decree to limit gas consumption

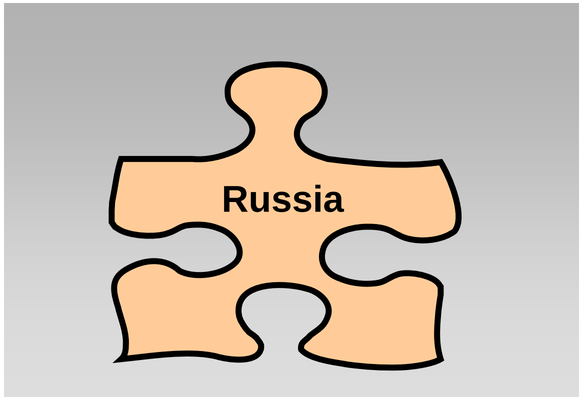
Winter 2006/07?

- Continue to be reliant on Russian supplies

Beyond 2006/07?

- New LNG terminals at Brindisi (2008) and Rovigo (2007)
- New pipeline connections with Algeria and Greece

Russian picture?



Winter 2005/06

- Russian supplies have significant effect on European gas markets
- Ukraine dispute:
  - Reduced flows in Italy & France
  - Knock on impact on available gas for GB

Winter 2006/07?

- Potential for Ukraine dispute to flare again?
- Dispute with Turkmenistan – may reduce sales to Gazprom?
- Gazprom transportation constraints
- Risk of interruption to supplies which may impact on IUK flows?

Beyond 2006/07?

- Ongoing relationship with Russia important – key supplier to EU

Ofgem’s work ahead of Winter 2006/07

Initiatives ahead of winter – new incentives on NG?

Customer concerns about quality of info:

- NG website performance and demand forecasting
  - Better info delivers benefits to customers

New incentives on NG are being proposed

Website performance incentive

Demand forecasting incentive

Implementation ahead of this winter proposed

- Consultation closes 25-Aug

New information for GB market

- Sub terminal flows currently available on a D+2 basis
- North/South data available closer to real time

Ofgem approved energywatch Modification 006

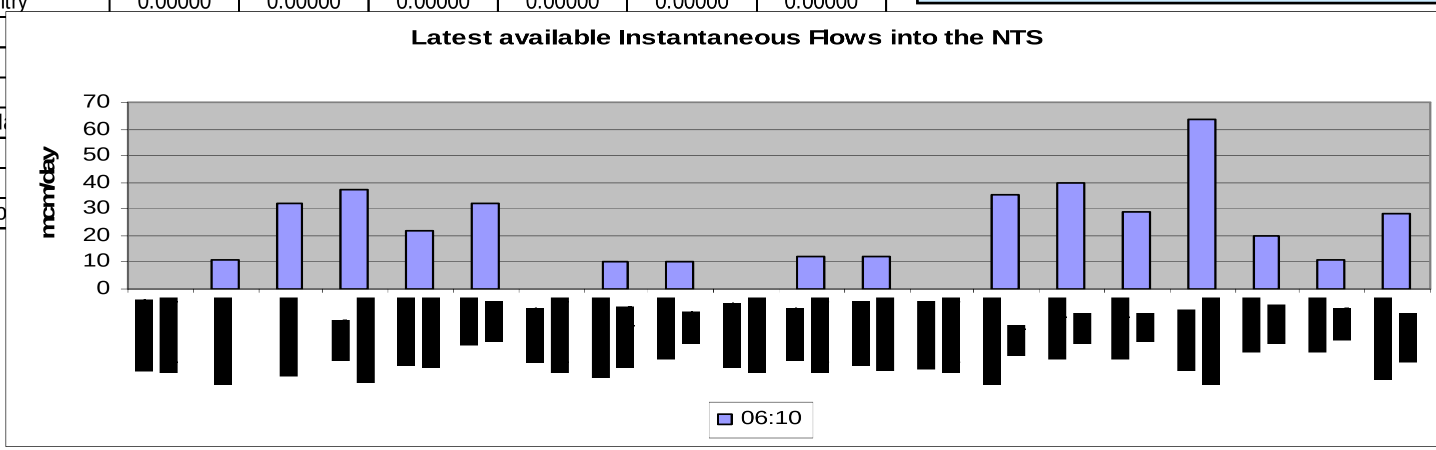
Sub-terminal flows will be available to the whole market on a “close to real time” basis

Will be implemented for this winter

– October start date

006–New information this winter

	Instantaneous Flows (mcm/day)					
System Entry Name	**06:00**	**06:02**	**06:04**	**06:06**	**06:08**	**06:10**
Avonmouth - System Entry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Bacton - Philips	9.98755	10.01123	10.11491	10.24528	10.42872	10.61217
Bacton - Shell	30.47342	30.60110	31.87790	32.00558	32.16002	32.31446
Bacton Interconnector	36.51360	36.59040	36.66720	36.79488	36.94932	37.05372
Bacton Seal Subterminal	21.60274	21.65794	21.71314	21.76834	21.82354	21.90850
Barrow - BGE&P	29.85459	31.05459	31.05459	31.05459	31.05459	32.03060
Dynevor - System Entry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00456
Easington - BP Dimlington	10.25160	10.27560	10.29960	10.39560	10.41960	10.44360
Easington - Other	9.85470	10.00015	10.52680	10.20289	10.00578	9.99753
Glenmavis - System Entry	0.10563	0.10563	0.10563	0.11043	0.11043	0.12243
Hornsea - System Entry	11.85620	11.95462	11.82880	11.86542	11.48439	11.94654
Isle of Grain Sub Terminal	12.50343	12.50703	12.50943	12.51183	12.51195	12.51207
Partington - System Entry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Rough - System Entry						
ST Fergus - Mobil						
ST Fergus - Shell						
ST Fergus - Total Oil M						
Teesside - Amoco						
Teesside - Enron						
Theddlethorpe - Conoco						



- October release of flow data
- Users to develop understanding
- NG holding workshops in September

Demand side response initiatives

Proposals raised by market participants

- **Ofgem welcomes early consideration by industry**

Mod 086 - sought to enable NG to procure DSR via reserve contracts

- Ofgem rejected on 14-July - finely balanced decision
- Weaken incentives to balance - undermine market provision
- Worthy of further consideration – cash out interaction important

Mod 088 – seeks to enable additional DSR

- I&C customers with Automated Meter Reading meters
- UNC workgroup underway
- Some elements may be available for this winter

Other key aspects of Winter Outlook

Gas quality

- Bacton blending study
  - Blending technically feasible
  - Systems and operational changes required
  - NG consider not possible for winter 2006/07
  - Work will continue
  - Ofgem workshop

Demand forecast

- Lower forecast of demand
- Lower demand side response requirements
- Methodology review
  - Unrestricted and restricted forecasts

Views welcome on both areas

Energy review

Key outcomes

- Ensure energy supplies are secure
  - Manage increased dependence on gas imports
  - Ensure timely investment in generation and networks
- Minimise carbon emissions
  - Facilitate new nuclear stations
  - Steps to remove barriers to carbon capture

Ofgem's views

- Welcome commitment to markets and effective independent regulation
- Ofgem is engaged in developing energy networks for the 21st Century
- EU focus is key to achieving review's goals

Ofgem will actively input into next steps

Promoting choice and value for all gas and electricity customers