

Winter Consultation 2007/8

June Update

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nationalgrid

Growing capability – Increasing uncertainty

♦ Looking Back – Winter 2006/7

- ♦ New infrastructure
- ♦ Mild winter – market not tested
- ♦ Low prices
- ♦ Declining demand

♦ Looking Forward – Winter 2007/8

- ♦ Further infrastructure investments
- ♦ European market interaction
- ♦ LNG – a world market
- ♦ Do pipes mean gas?
- ♦ Will demand bounce back?
- ♦ Weather

UKCS Forecast

Peak (mcm/d)	2006/7		2007/8	
	Forecast	Highest	Initial View (March)	Revised View
Bacton	75	55	67	74
Barrow	24	25	23	22
Easington	16	15	15	13
Point of Ayr	2	4	2	2
St Fergus	94	95	89	89
Teesside	30	35	28	26
Theddlethorpe	26	28	26	26
Total	267	257	249	252

- 2006/7 UKCS supplies inline with forecast (except for low flows from high swing fields at Bacton and Barrow)
- 14 mcm/d of new fields included in 2007/8 forecast
- 90% supply availability used for operational planning (227 mcm/d)

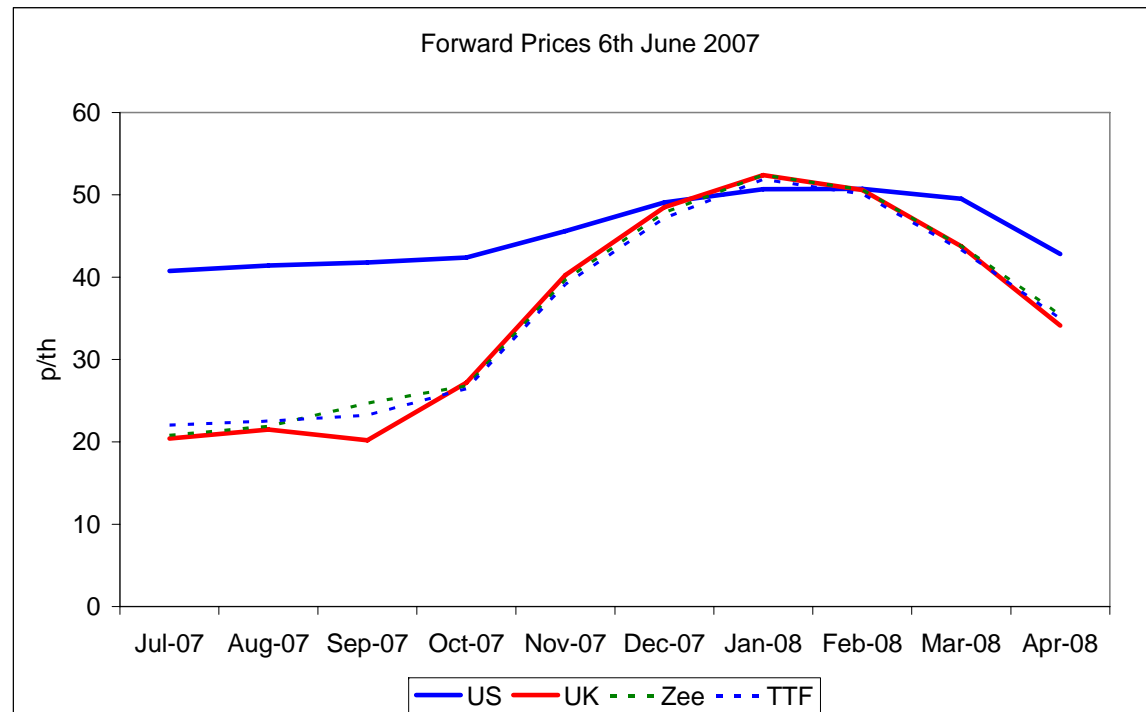
Imports (1)

- ◆ IUK
 - ◆ Further expansion planned to 74 mcm/d
 - ◆ Expected to operate as marginal source of supply, following price differentials
 - ◆ Expected to have higher import potential post December
- ◆ BBL
 - ◆ Expected to flow at near uniform 25 mcm/d to satisfy Centrica contract (3 bcm summer, 5 bcm winter)
- ◆ Norway
 - ◆ Ormen Lange still reported to be on schedule for October delivery
 - ◆ High volumes expected through Langeled & Vesterled with low volumes through newly completed Tampen Link
 - ◆ Langeled imports assumed at 45 mcm/d to enable near full volumes from Rough. Higher volumes may impact other Easington deliveries

Imports (2)

- ◆ LNG

- ◆ New deliveries expected this winter from Milford Haven
- ◆ Dragon expected Q4 2007
- ◆ South Hook expected Q2 2008, hence excluded from forecasts
- ◆ Grain expected to operate as in 2006/7
- ◆ Due to lower gas price, Teessport not expected to operate at base load
- ◆ All LNG is subject to risk of cargo diversion to US and other markets



Non-Storage Supplies

	2006/7 Base Case	2007/8 Max Capacity	2007/8 Initial View	2007/8 Revised View
UKCS	240	252	224	227
Norway	48	104	70	70
IUK	36	74	37	37
BBL	14	41	25	25
LNG	13	69	46	33
Total	350	546	402	392

- Whilst latest view for 2007/8 suggest much higher non-storage supplies than for last winter, considerable supply uncertainty exists:
 - UKCS – lower supply availability, no flow from high swing supplies
 - Norway – Ormen Lange delayed, higher flows to Continent
 - IUK – exports due to well supplied UK
 - BBL – lower flows due to renegotiated contract with Centrica or virtual exports
 - LNG – commissioning or NTS delays, diverted cargoes
- Besides down side risk there is also upside possibilities for all sources
- For assessment consider a +/- 30 mcm/d supply range **nationalgrid**

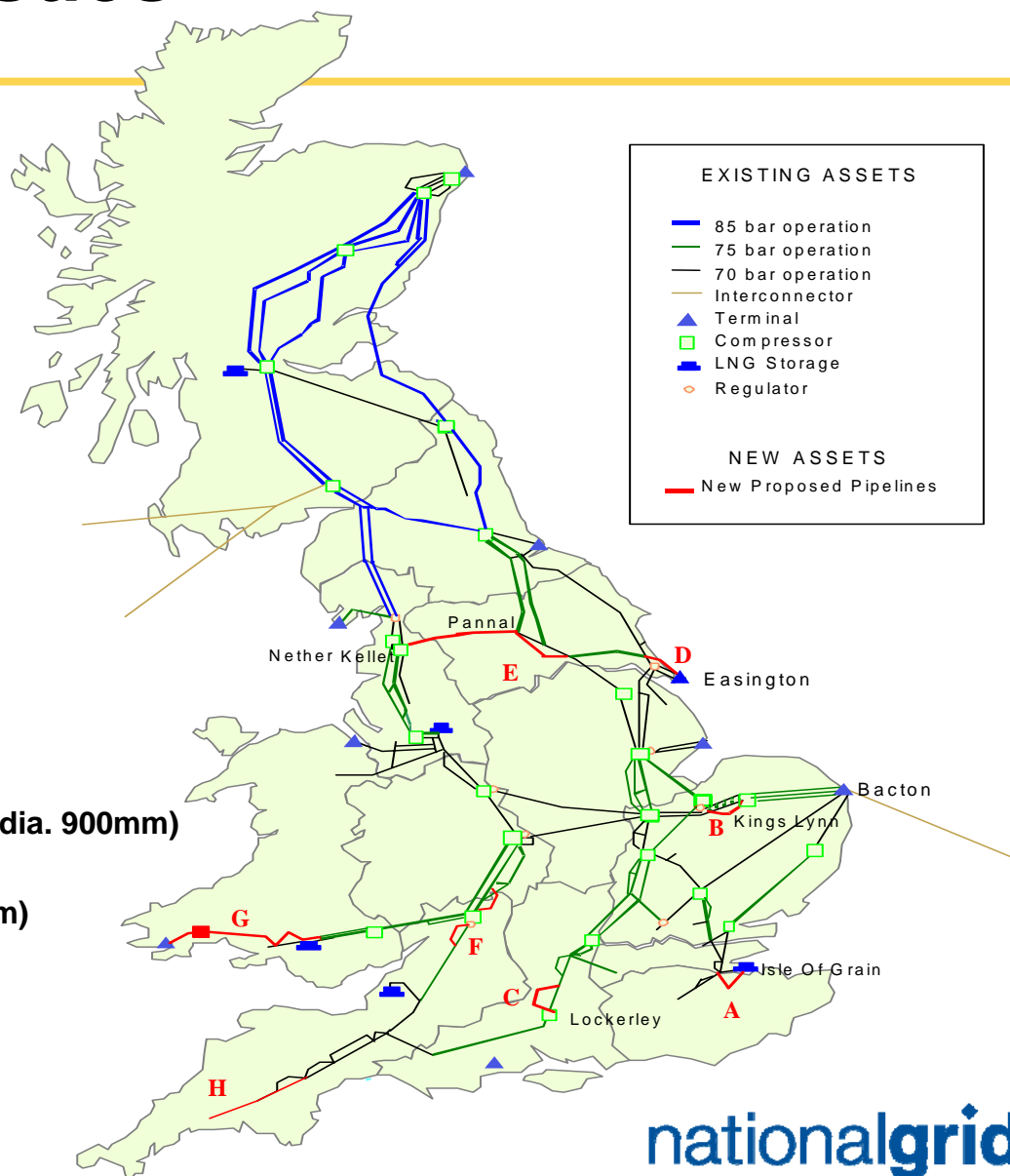
Storage

- ◆ For next winter we anticipate higher storage availability through:
 - ◆ Hole House Farm – increased deliverability
 - ◆ Aldbrough – new salt cavity storage, phased build-up of capacity expected

Transportation Issues

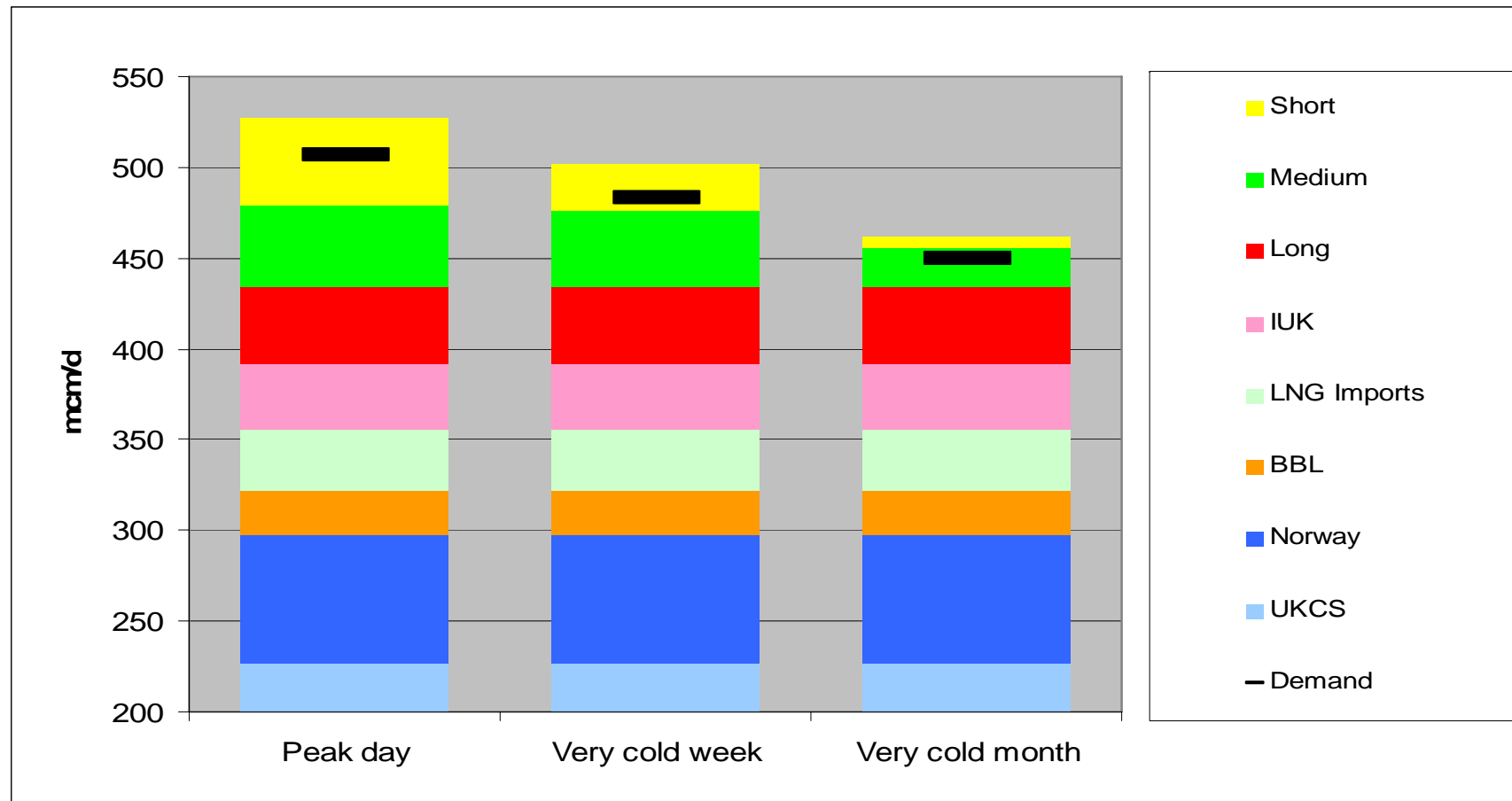
- ◆ Supply Pattern
- ◆ Trade & Transfer
- ◆ Easington
- ◆ Milford Haven

- A Isle of Grain to Shorne to Gravesend pipeline (dia. 900mm)
- B Kings Lynn to Wisbech pipeline (dia.1200mm)
- C Barton Stacey to Lockerley pipeline (dia. 900mm)
- D Easington to Ganstead pipeline (dia.1200mm)
- E Asselby to Pannal pipeline (dia.1200mm)
- F Wormington to Sapperton (dia 900mm)
- G Milford Haven to Tirley (dia 1200mm)
- H South West Reinforcement Projects (600mm)

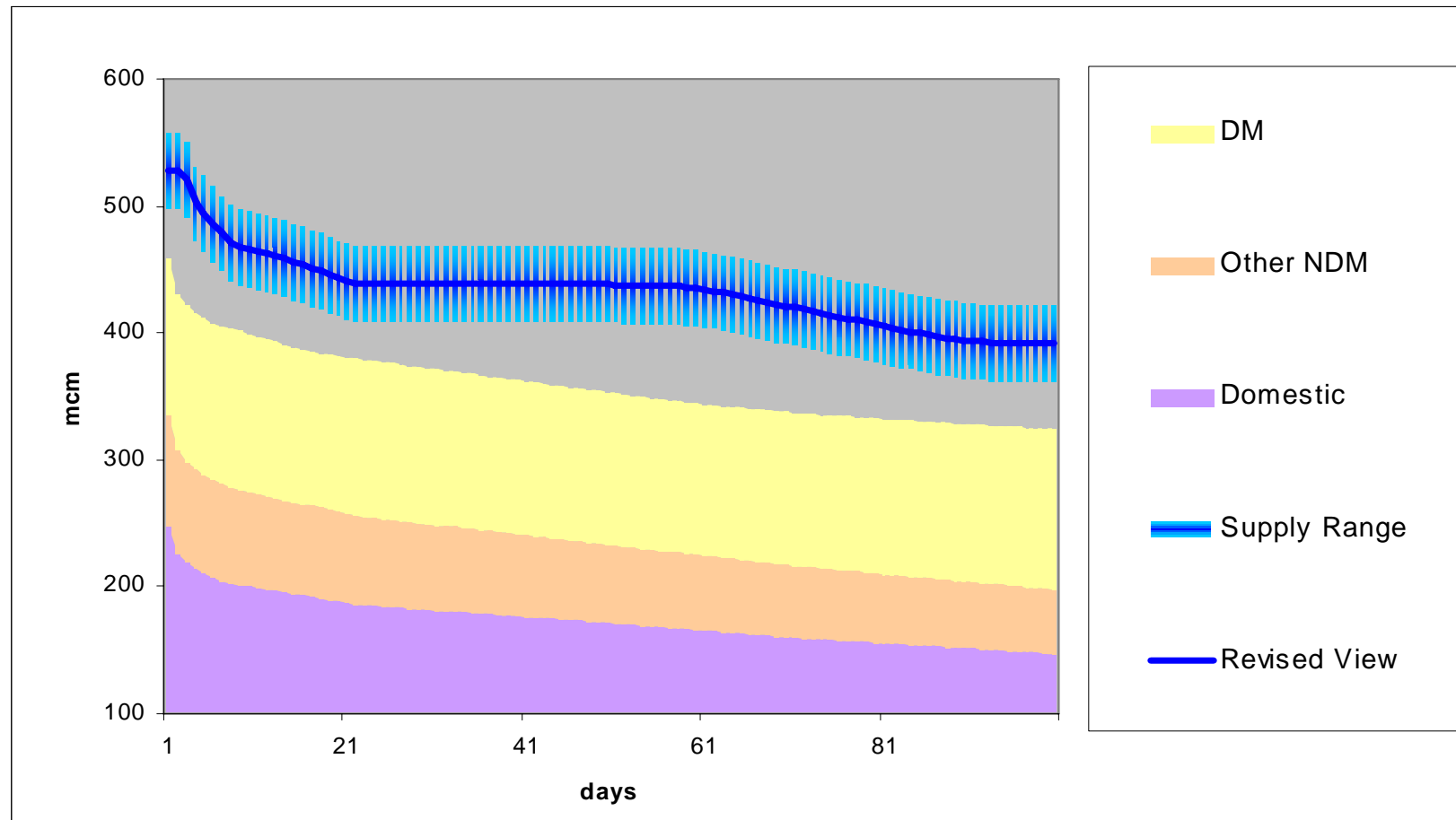


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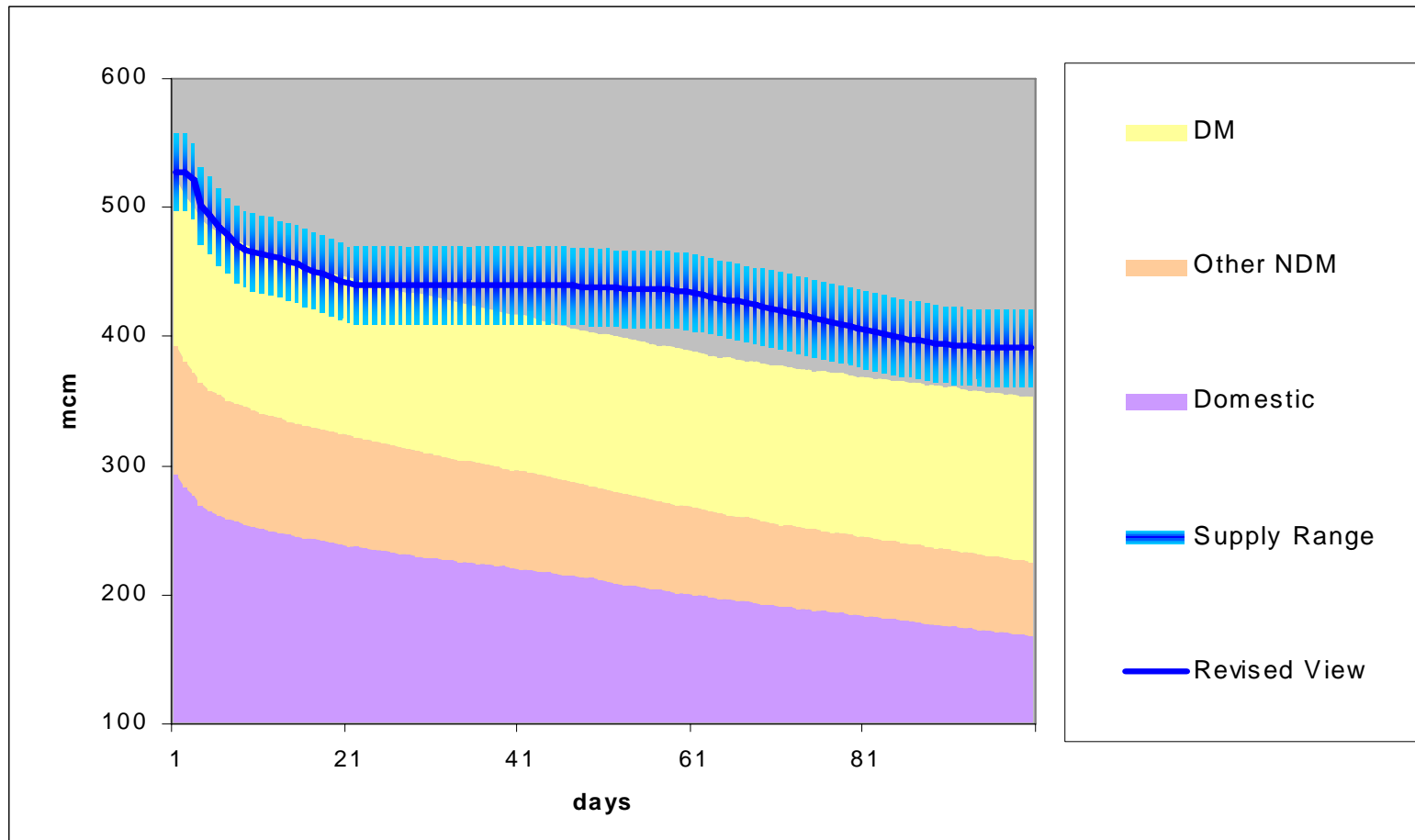
Balance - Peak Periods



Demand-Supply Balance - average winter



Demand-Supply Balance - 1:50 winter



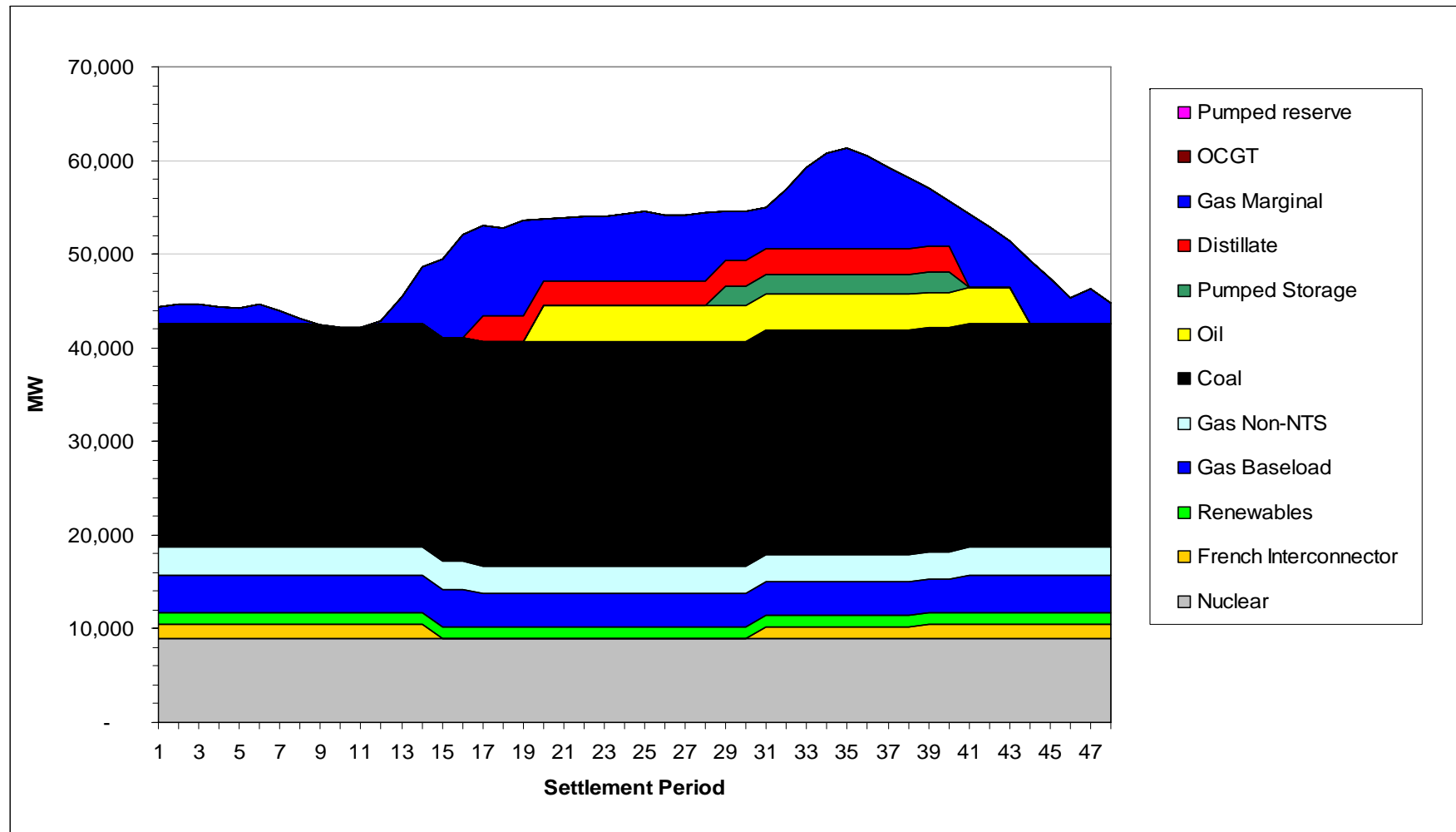
Demand Turndown Requirements

- ◆ **Improved gas demand-supply balance has reduced the requirement for demand side response from what we assumed necessary last winter.**
 - ◆ With increasing import dependency the swing in gas consumption by CCGT stations continues to be key in achieving gas supply/demand balance.
 - ◆ Little or no need for other large users to provide a demand response under most conditions.
 - ◆ There will be a need for other users to provide a significant response at times of both cold weather and a low gas supply scenario.

Initial Assumptions - electricity

- ◆ 0.7 GW new renewables in Scotland
- ◆ No new large stations in E&W
- ◆ Reduced output at Hinkley Point and Hunterston
- ◆ No demand growth – forecast peak 60.8GW
- ◆ Plant margin 24%
- ◆ Assuming 30% wind, margin is 22%
- ◆ LCPD – 1 January 2008 – no material impact
- ◆ No short-term mothballed plant

Merit Order 07/08 – Electricity



Summary 2007/8

- ◆ **Demand-Supply Balance Improved**
- ◆ **Uncertainties:**
 - ◆ Weather
 - ◆ Will demand bounce back?
 - ◆ Further infrastructure investments
 - ◆ European market interaction – electricity and gas
 - ◆ Do pipes mean gas?
 - ◆ LNG – a world market
- ◆ **Can't afford to be complacent**
- ◆ **Feedback by 3 August 2007**