

Winter Experience 2006/7

Chris Train

Network Operations Director

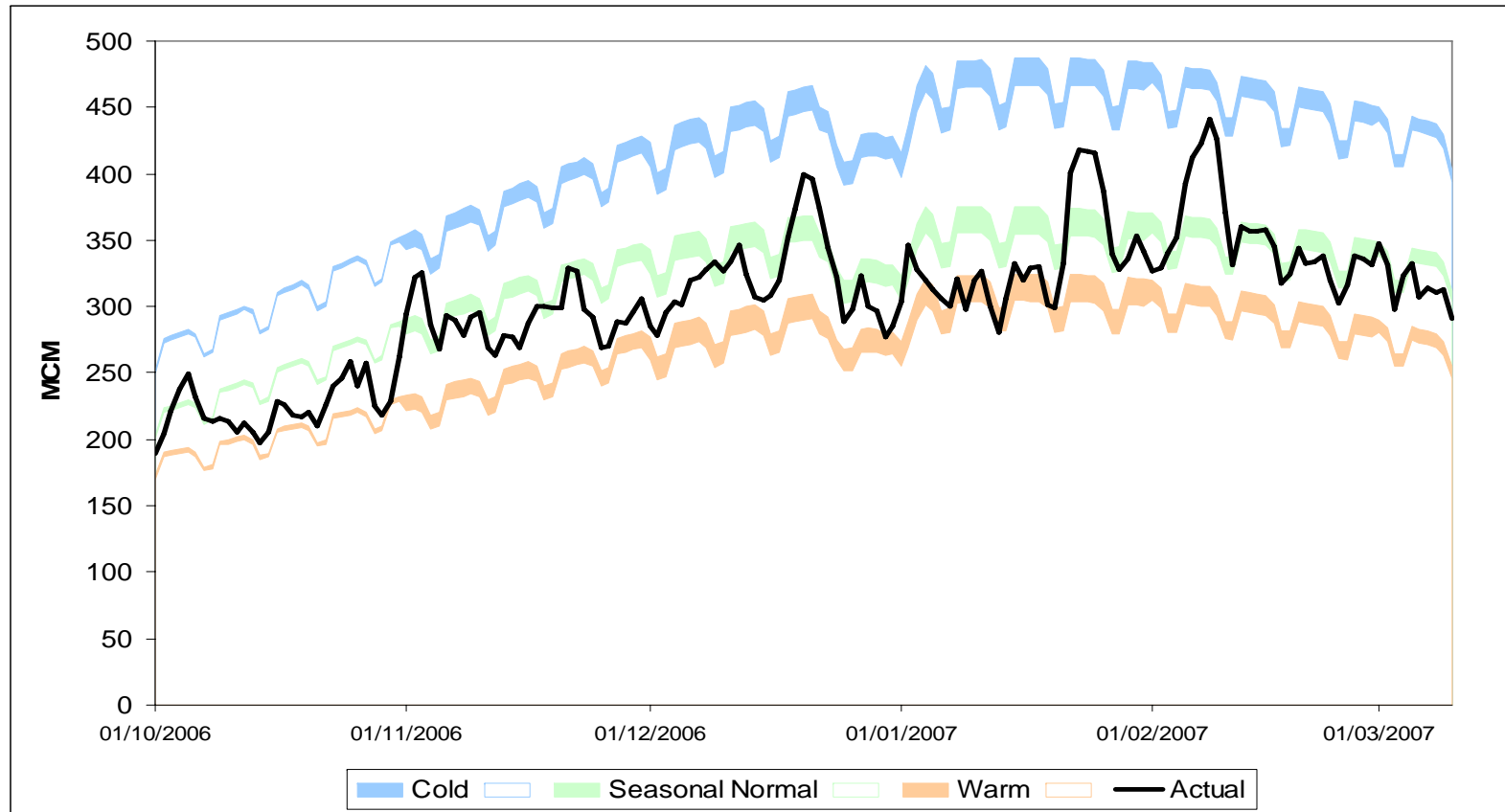
March 2006 – Issues for Winter 2006/7

- ◆ High level of uncertainty for 2006/07
- ◆ Experience from the loss of Rough
- ◆ Weather
- ◆ UKCS – extent of decline
- ◆ Availability of new infrastructure under construction
- ◆ Utilisation of new infrastructure
- ◆ Electricity / Gas Market Interaction
- ◆ Availability of gas demand-side response

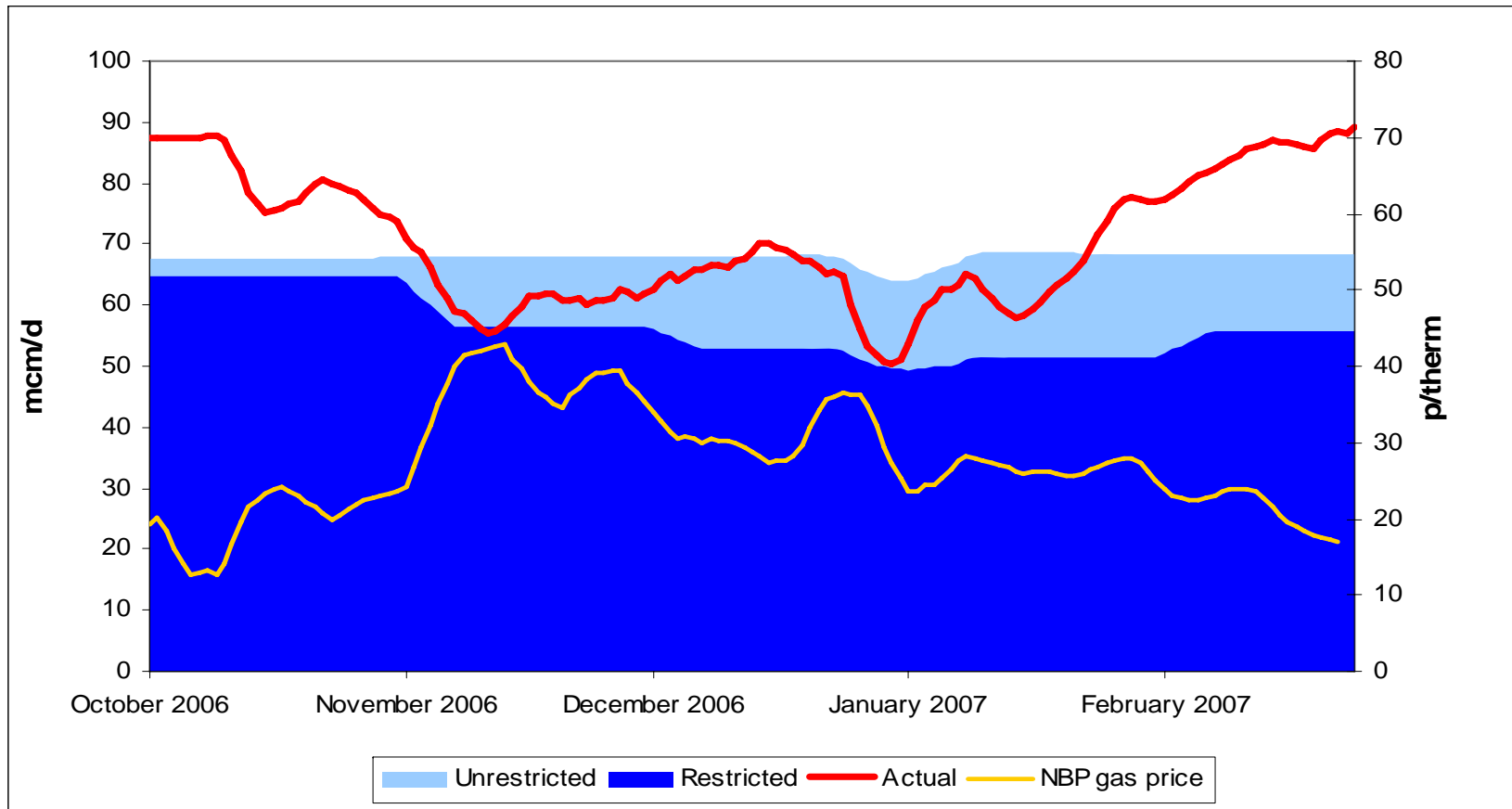
2006/7 Highlights

- ◆ Mild winter
- ◆ New infrastructure
- ◆ Low gas prices
- ◆ Increasing European Interaction
- ◆ Declining domestic gas and electricity demand
- ◆ Switch from coal to gas

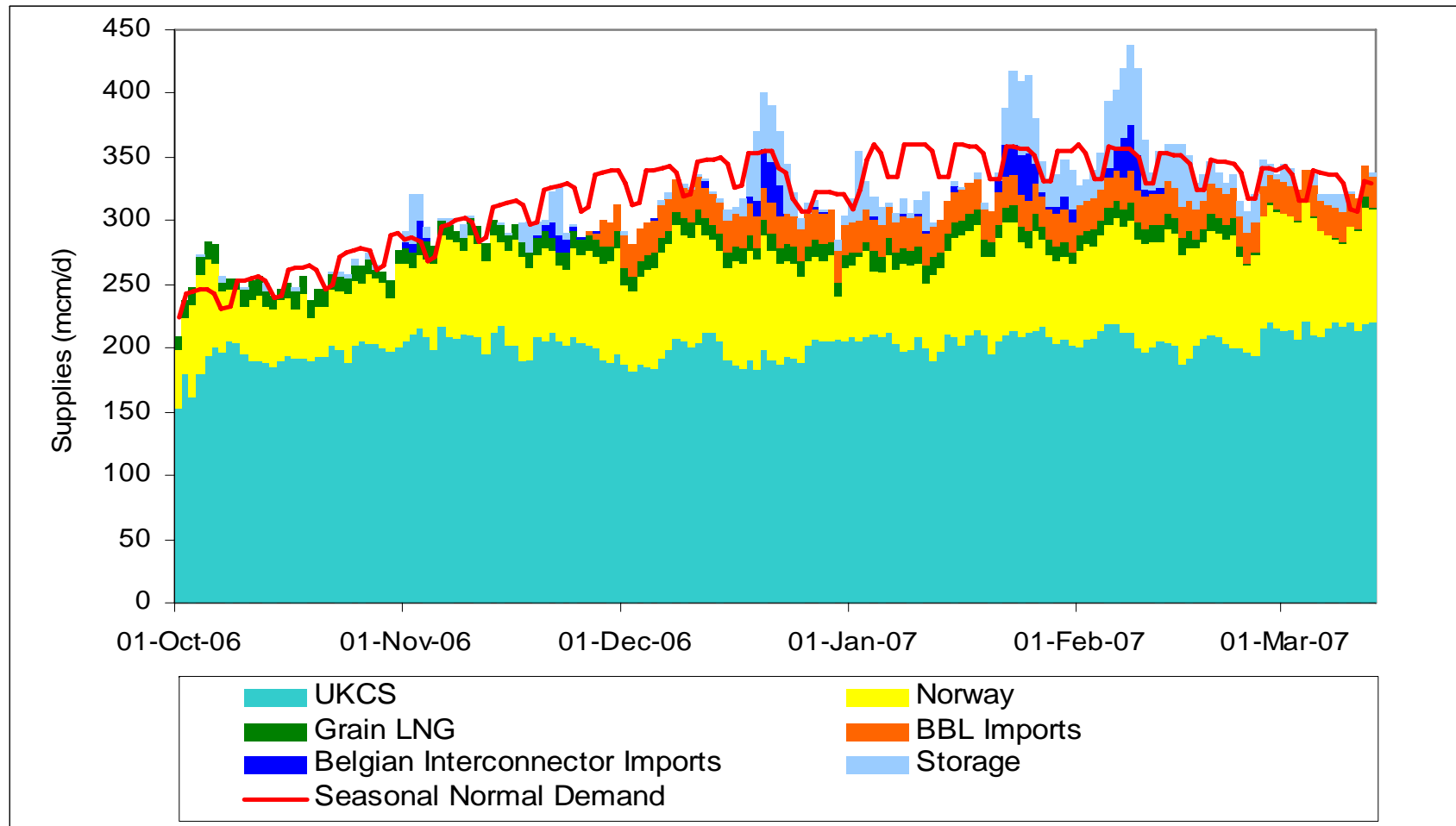
2006/7 Gas Demand



CCGT Gas Demand



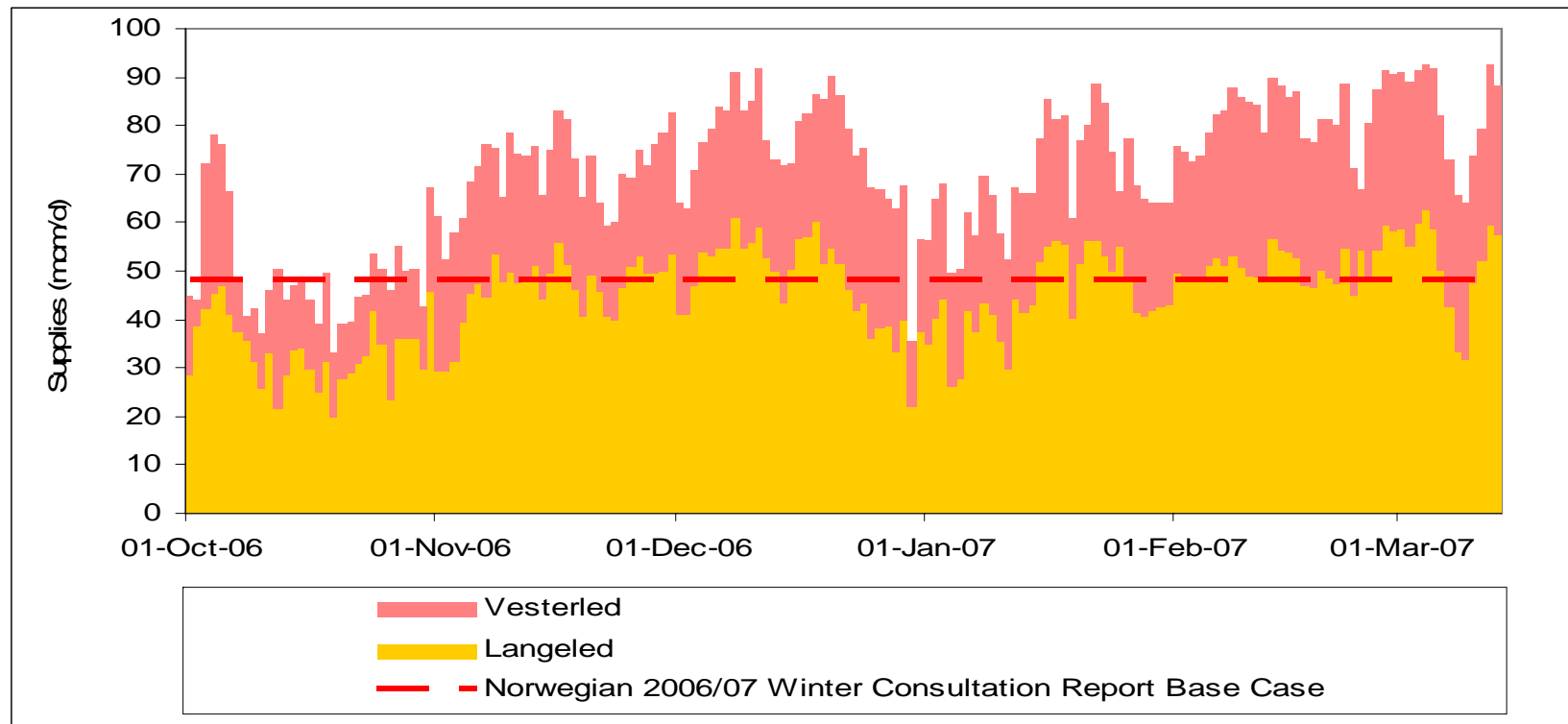
Winter 2006/7 Gas Supply



Norwegian Supplies

- ◆ Langedled began flowing on 27 Sep 2006
- ◆ Norway 70 mcm/d average

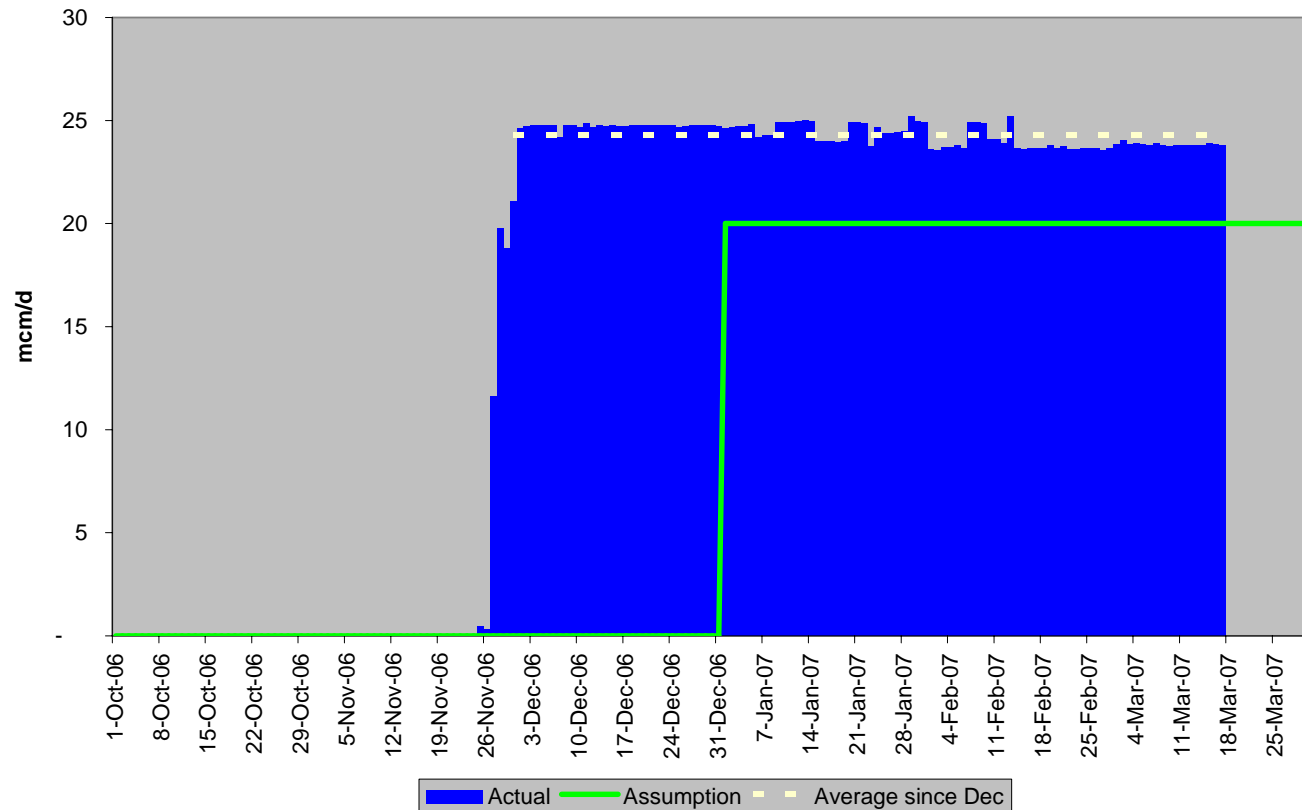
WCR	Oct-Dec	Jan-Mar
Norway	48	48



BBL

- ◆ Began flowing on 25 Nov 2006
- ◆ 24 mcm/d average since Dec despite NL to GB premium

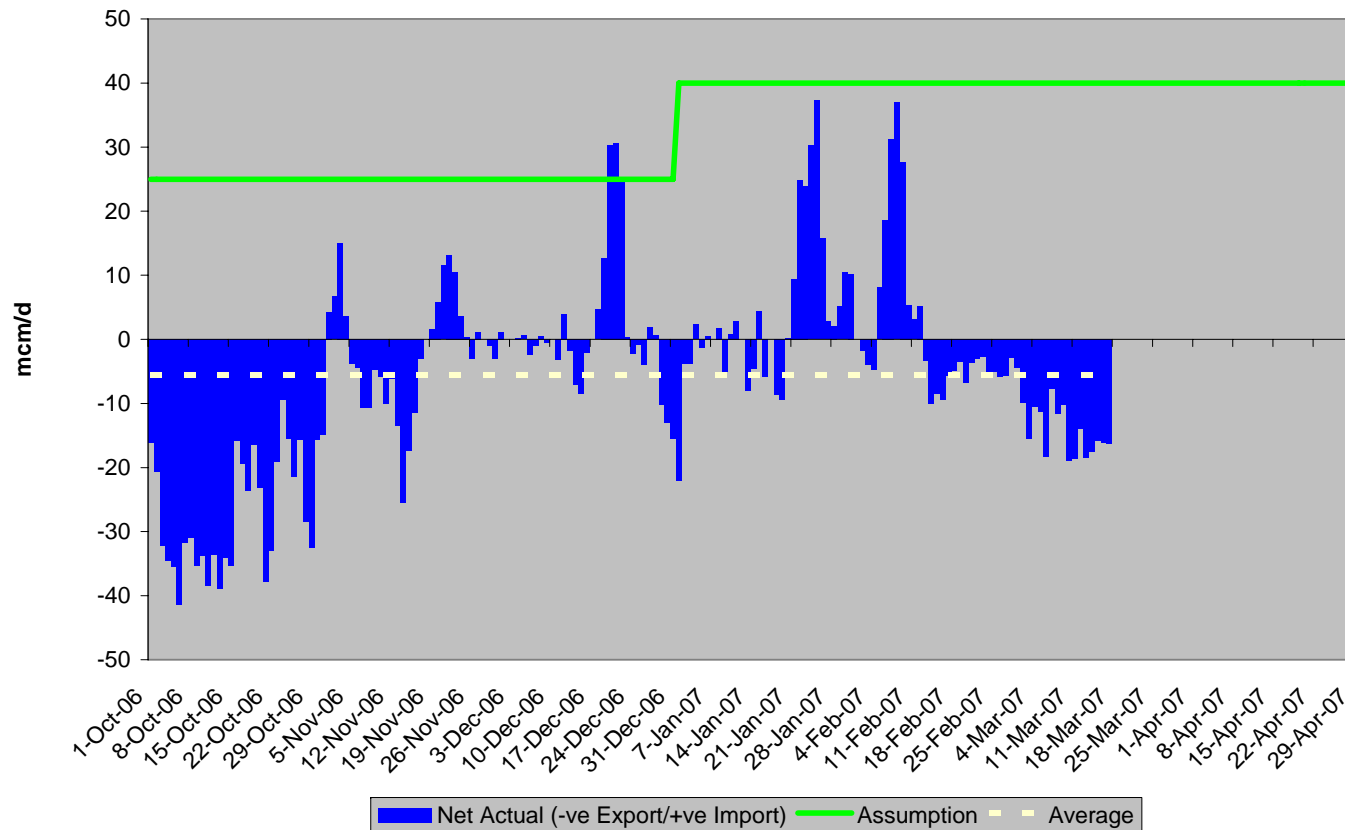
WCR	Oct-Dec	Jan-Mar
BBL	0	20



IUK

- ◆ 68 mcm/d import upgrade commissioned on 1 October 06
- ◆ Maximum import over period was 37 mcm/d
- ◆ Average flow over period was 5 mcm/d export

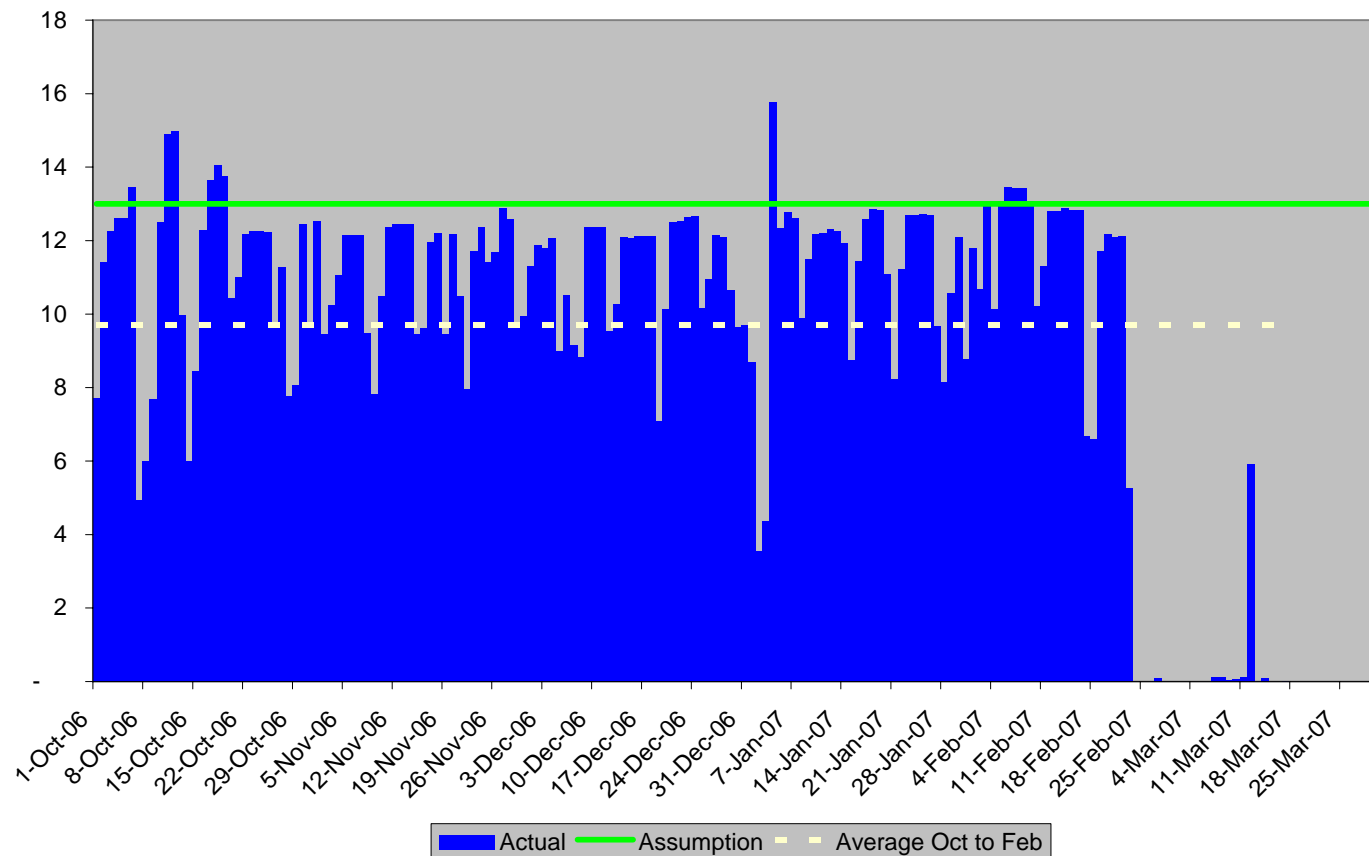
WCR	Oct-Dec	Jan-Mar
IUK (Import)	25	40



Grain LNG

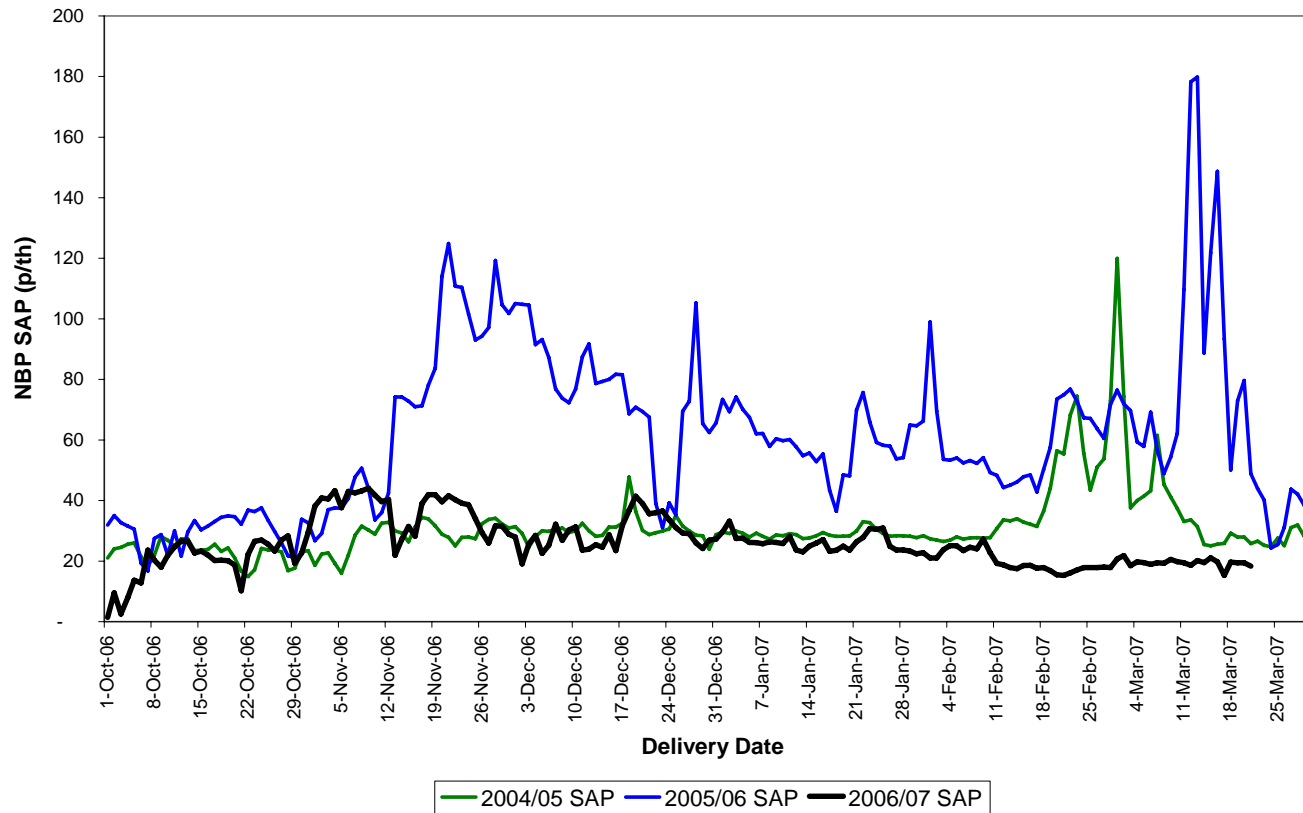
- ◆ 10mcm/d average
- ◆ Ceased NTS export on 26 Feb

WCR	Oct-Dec	Jan-Mar
Grain	13	13

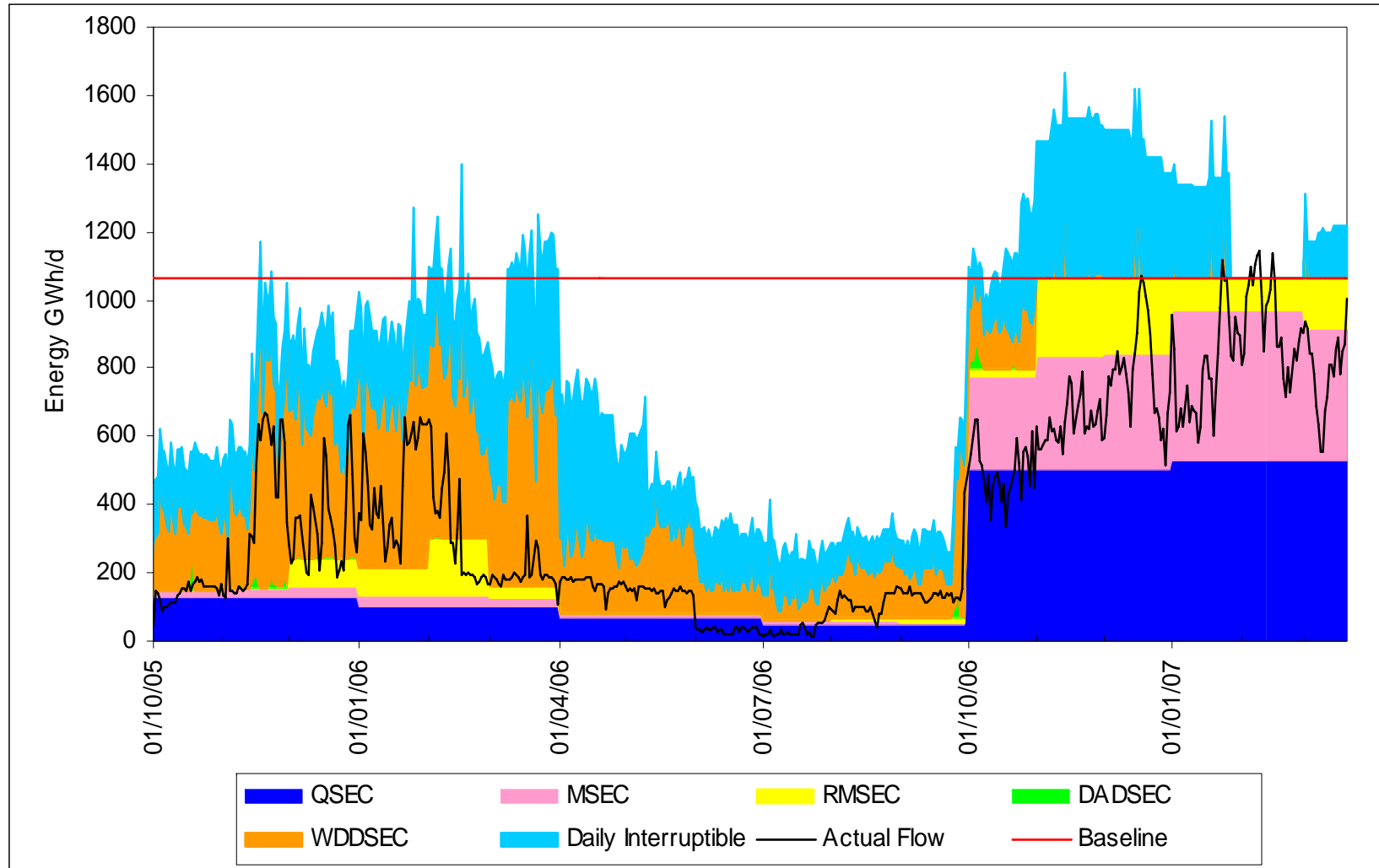


NBP Prices

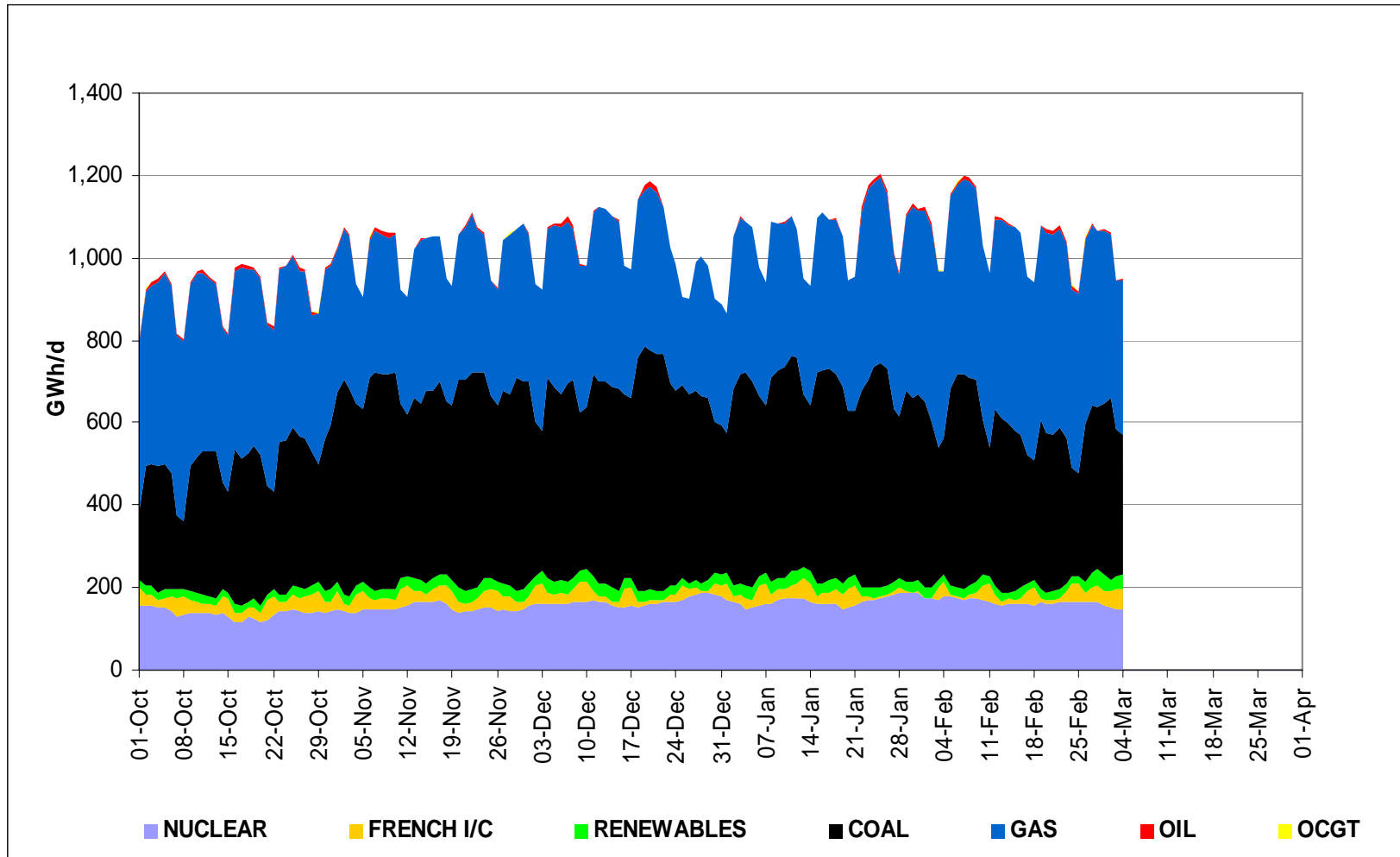
SAP p/th	Min	Ave	Max
2004/05	14.90	31.00	119.95
2005/06	16.80	60.90	179.80
2006/07	1.44	25.88	44.05



Easington – Capacity Sold Vs Actual Flows



Winter 2006/7 Electricity Supply



Electricity Highlights - 2006/7

- ◆ Storm
- ◆ Nuclear Outages
- ◆ Longannet Outage
- ◆ Demand lower than anticipated
- ◆ More export to France than in recent years
- ◆ Swing from coal to gas- fired generation as gas prices fall

January storms

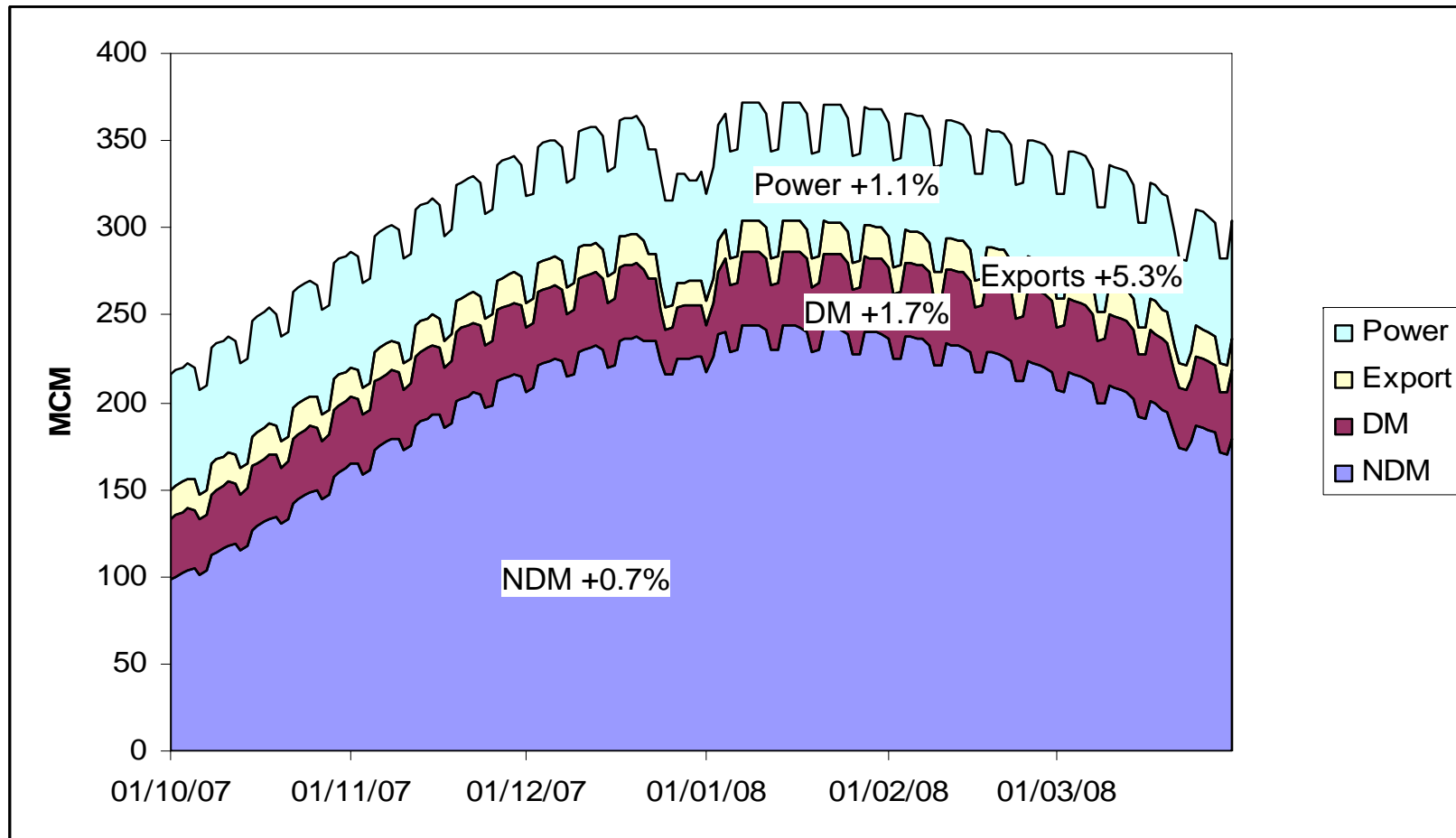
- ◆ Severe storms were experienced across UK on 18 January
- Reported as the worst storms for 17 years
- At least 21 separate trips affecting 15 circuits
- Field staff investigated reports of damage to eight circuits, with the North West the worst hit.
- Foot patrols were carried out along a 30 mile stretch of line together with aerial surveys using the NG helicopter. Around 50 staff were involved in the investigation and repair operation.



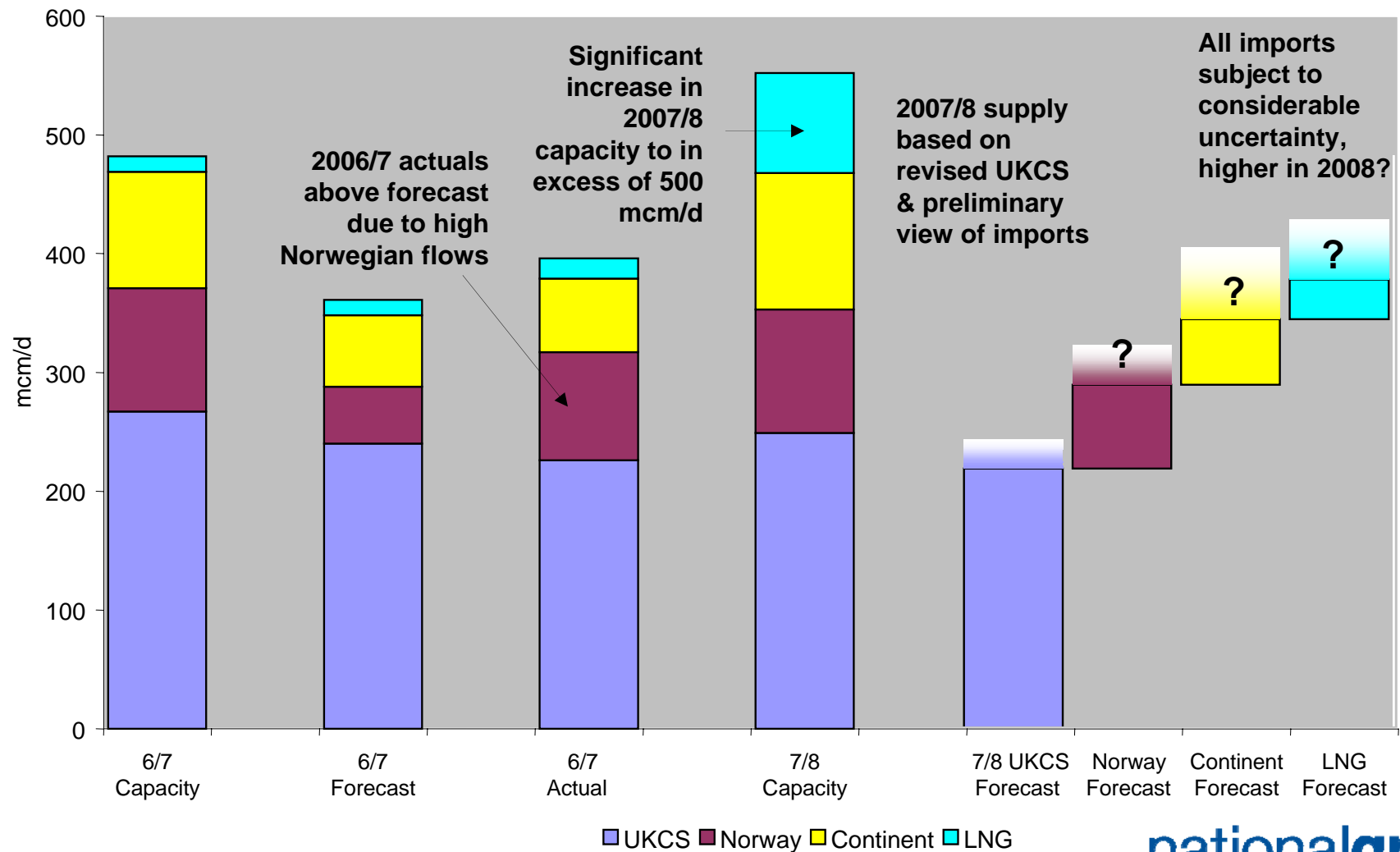
Winter 2006/7 Generation Issues

- ◆ **Three nuclear plants on long term fault outage over the winter (2.9 GW)**
 - ◆ Hinkley Point B, Hunterston B, Oldbury
 - ◆ Due to return during spring & summer
- ◆ **Longannet on fault outage with collapsed coal conveyor (2.3 GW)**
 - ◆ Conveyor now repaired and generation running

Winter 2007/8 Gas Demand Forecast



2007/8 Preliminary View of non-Storage Supplies



Note UKCS and Norwegian flows are subject to estimate for Vesterled

Electricity Capacity – 2007/8

- ◆ 0.7 GW of renewables to be connected in Scotland
- ◆ No new large power stations commissioning (SYS has Langage & Pembroke TEC contracted but not due to commission in 07/8)
- ◆ Two Magnox stations closed on 31/12/06 Dungeness A (0.4 GW) & Sizewell A (0.4 GW)
- ◆ Reduced nuclear output at Hinkley Point and Hunterston gives a best view of 76 GW of capacity
- ◆ With demand forecast of 61.2 GW, plant margin is 24%
- ◆ Wind increasing in importance, with 2 GW of capacity. Assuming 30% loadfactor, margin is 22%

Summary

- ◆ **Key issues 2006/7**

- ◆ New infrastructure
- ◆ Mild weather, market remains untested
- ◆ Low prices
- ◆ Declining demand

- ◆ **Key issues 2007/8**

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

- ◆ **Can't afford to be complacent**

- ◆ **Winter 2007/8 Preliminary Consultation Report**