# Winter Outlook 2009/10

Chris Train, Network Operations Director.











nationalgrid
The power of action.

### Met Office Sept 09 – Early indications for winter 2009/10

- Rainfall: Signals slightly favour near or above average rainfall over much of Northern Europe, including the UK
- Temperature: Preliminary indications of near or above average temperatures over much of Europe including the UK
- Winter 2009/10 likely to be milder than last year for the UK, with a 1 in 7 chance of a cold winter
  - Weather series: 1971-2000
- Main forecast for Winter 2009/10 will be issued in November by Met office



# Gas







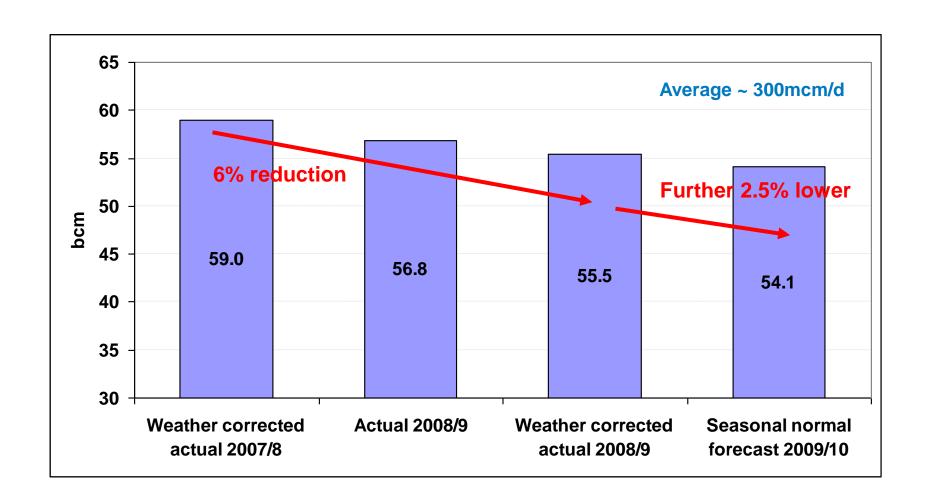




# nationalgrid

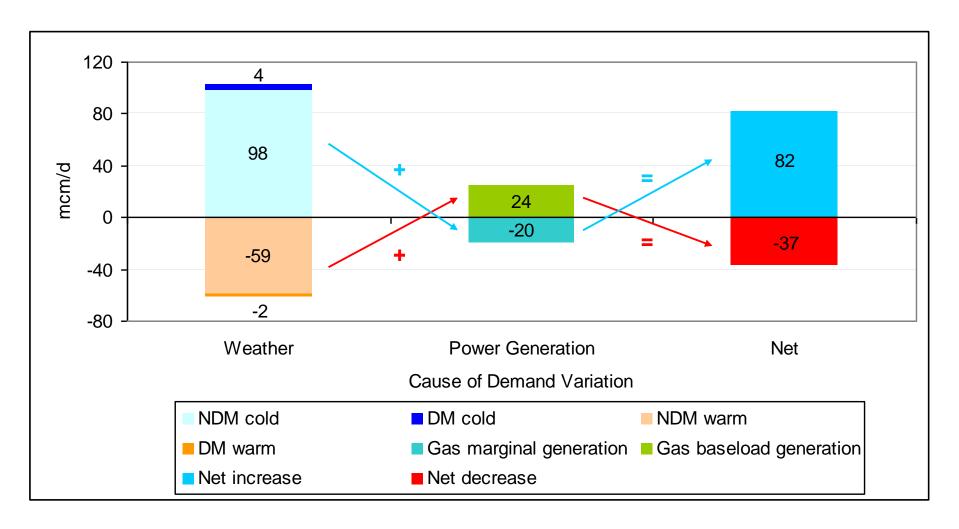
The power of action.

### **Total UK winter gas demand**





### Possible variation in daily gas demand



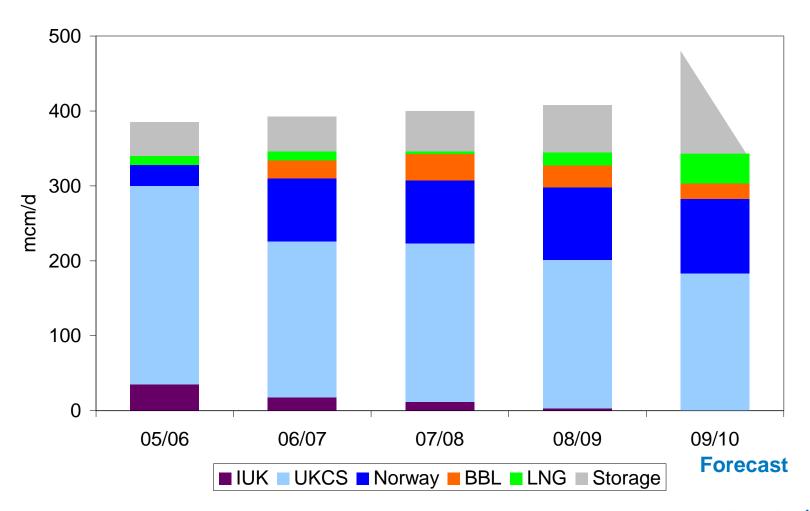


### Historic & forecast supplies (highest 20 demand days)

(mcm/d)	2005/6	2006/7	2007/8	2008/9	2009/10
UKCS	265	208	211	198	183
Norway	29	84	84	97	100
BBL		24	36	29	20
LNG	12	12	3	18	40
Total NSS <sup>[1]</sup> (ex IUK)	305	329	335	341	343
IUK	35	18	12	3	0-30
Total NSS	341	347	347	344	331 - 386
Storage	45	46	54	63	124
Supply = Demand	386	392	401	407	

<sup>&</sup>lt;sup>11</sup> NSS = Non Storage Supply

### Supply make-up, top 20 days



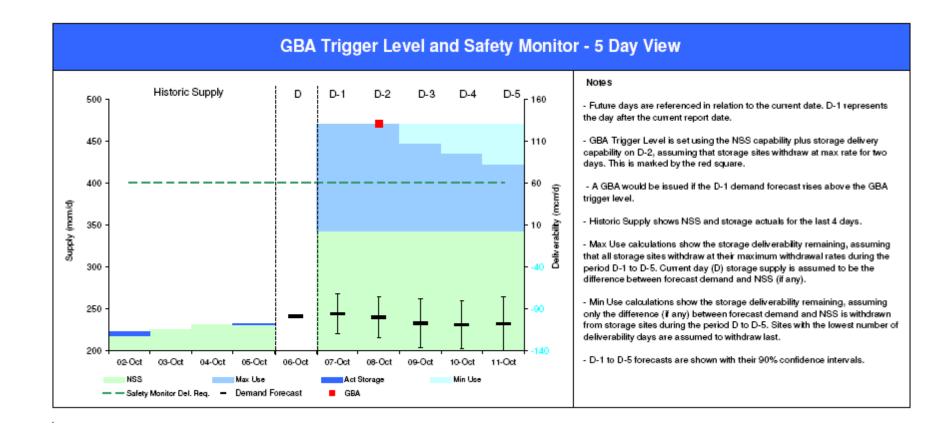


### Drivers that may influence supply & demand in 2009/10

- Repeat of Russia / Ukraine or other Continental / global driver
  - IUK exports?, lower Norway?, lower LNG?
- Lower Continental and global demand increases UK supply
- Change in gas prices
  - Current winter UK price is below Continental contract
    - More Norwegian?, IUK exports?
  - UK & US prices are closely aligned
    - Limited incentives for LNG to cross Atlantic for trades
  - Future UK summer prices = winter prices
    - Less of an incentive to flow storage?
    - Higher flows from non storage supplies?
- Higher demand due to lower wholesale prices, notably for power generation
- Weather & events!!



#### **Information Provision**





# **Electricity**





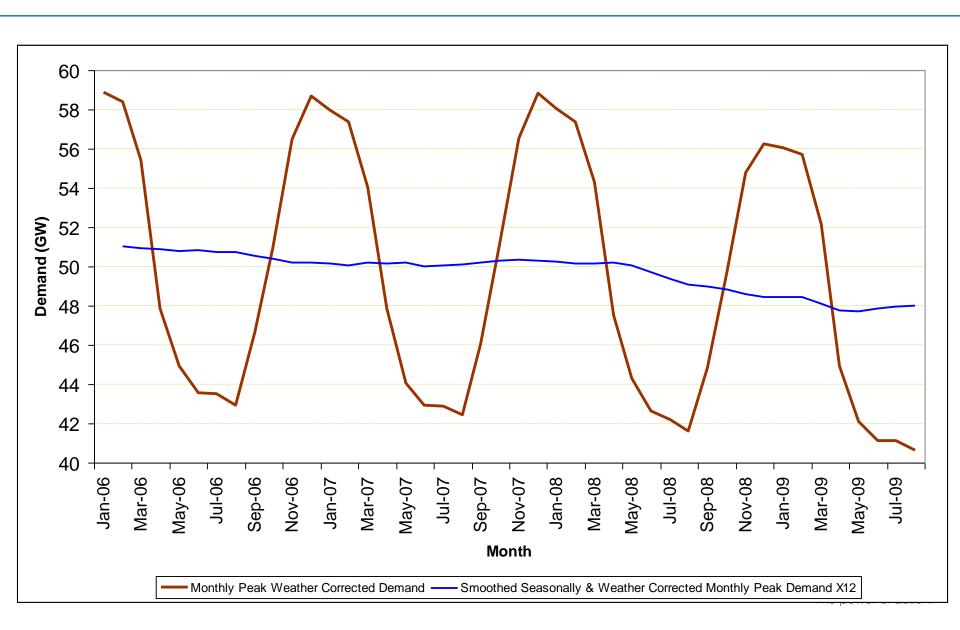






# nationalgrid The power of action.

## **Demand – Increased Uncertainty**

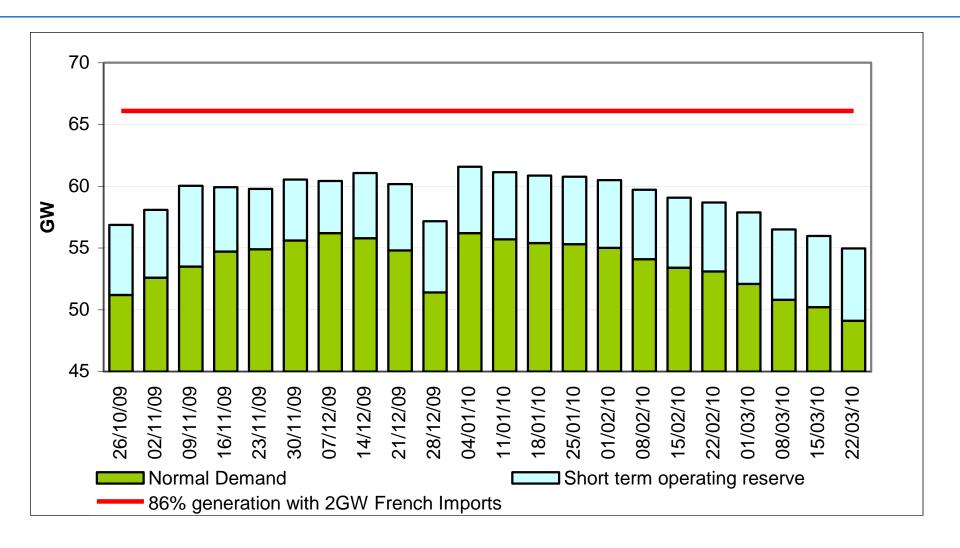


# **Generation Capacity – Assumed Availability**

Power Station Type	Full Metered Capacity (GW)	Assumed Availability	Assumed Availability (GW)
Nuclear	10.4	80%	8.4
French Interconnector	2.0	100%	2.0
Hydro generation	1.1	80%	0.9
Wind generation	1.6	27%	0.4
Coal	28.1	85%	23.9
Oil	3.5	95%	3.3
Pumped storage	2.7	95%	2.6
OCGT	1.3	80%	1.0
CCGT	26.3	90%	23.6
Total	77.0		66.1
Overall availability		86%	

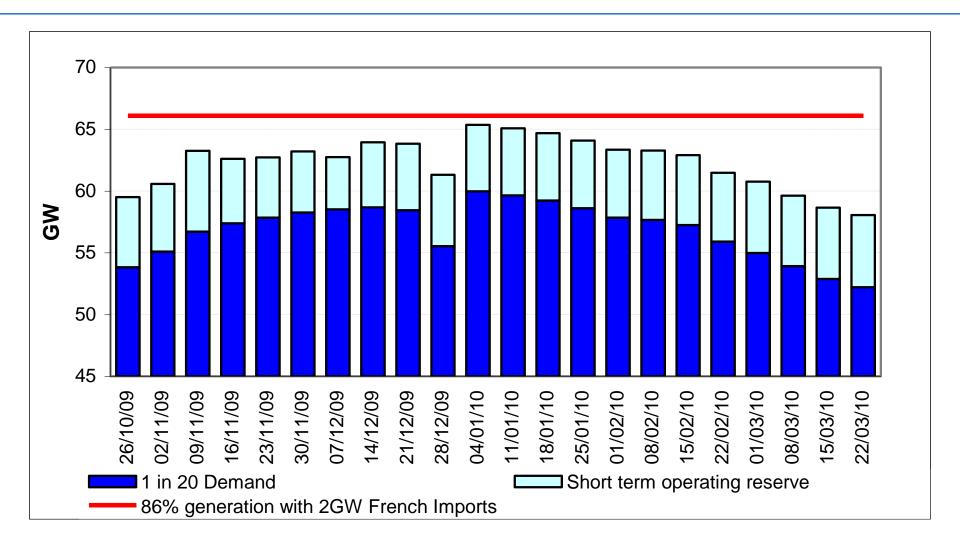


## **Normal Demand and Assumed Availability**



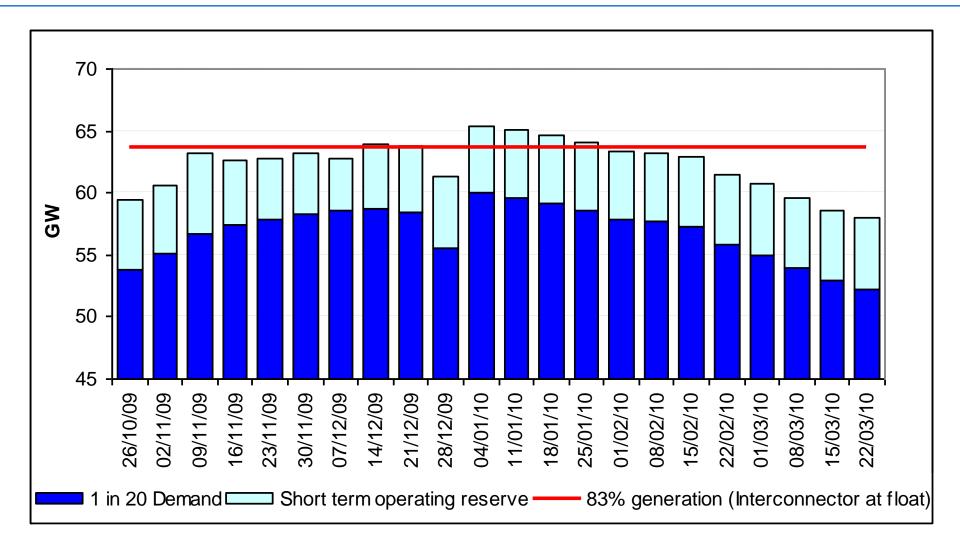


# 1 in 20 Cold Demand and Assumed Availability





## 1 in 20 Cold Demand and Low Assumed Availability





# **Summary for Gas & Electricity**

- Met Office: Winter 2009/10 likely to be milder than last year for the UK, with a 1 in 7 chance of a cold winter
- Forecast gas demand (weather corrected) 2.5% lower, on top of 6% reduction last winter. ACS Electricity demand for 2009/10 is expected to be about 5% lower than pre-recession (2007/08) winter
- Forecast non storage gas supply similar to last winter with more upside, notably through LNG. Forecasts generation supply also similar to last winter with possible upside through new CCGTs and more wind
- The overall gas & electricity demand / supply balance for winter looks relatively comfortable at this stage, operational margin for peak ACS demand is 15%
  - Shocks / unexpected events / cold weather could change this comfort level
- Economics of coal vs gas for base load generation are marginal but coal expected to be used at higher demand (prices)
- Gas for CCGTs continues to provide flex for electricity market and potentially a market response for gas
- Events happen!



#### **Useful Links**

Final Report Published – 1<sup>st</sup> October 2009 at: -

www.nationalgrid.com/uk/Electricity/SYS/outlook/

Updates to electricity demand forecasts, generation availability and surpluses can be found at: -

www.bmreports.com

Gas operational information can be found at: -

www.nationalgrid.com/uk/Gas/Data/

To feedback on the report to National Grid contact: -

Energy.operations@uk.ngrid.com

