

# Winter Outlook

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# Context

## Market developments

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- ♦ UKCS production is continuing to decline
- ♦ New importation and storage infrastructure is expected
  - ♦ Expansion of the Belgian Interconnector
  - ♦ Grain LNG
  - ♦ Humbly Grove storage facility
- ♦ Interactions between the UK and other markets are growing
  - ♦ We can no longer assume full imports through the Interconnector or of LNG whenever required in the UK
- ♦ Generation background is similar to last winter
  - ♦ 21% plant margin
  - ♦ But around one-third of electricity capacity is gas-fired

# May Consultation Document

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- ♦ Ofgem ask us to produce a winter outlook report each year
- ♦ In 2003 and 2004 we published a preliminary report in May
- ♦ In 2005 we issued a consultation report in May
  - ♦ Recognised the increasing dependence on market interactions
  - ♦ Two scenarios plus some sensitivities
  - ♦ Sought input on wide range of issues
- ♦ 15 responses, qualitative rather than quantitative
- ♦ No clear consensus but useful as a guide

# Winter Outlook Report Overview

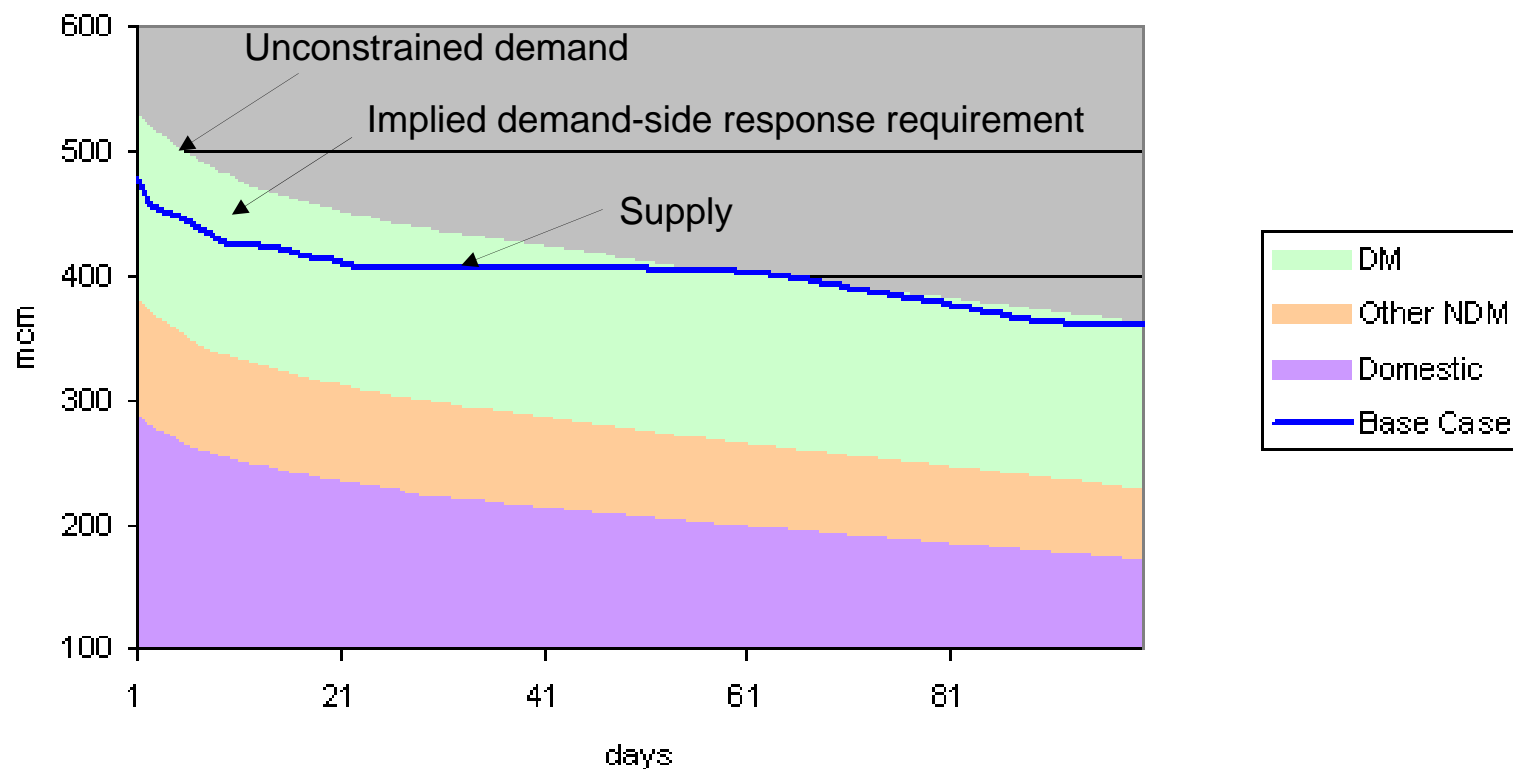
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- ◆ Published by Ofgem
- ◆ Takes account of latest analysis and guided by consultation
- ◆ Uses a base case rather than scenarios
  - ◆ Somewhere between the consultation scenarios
  - ◆ A balanced view but lots of uncertainty
  - ◆ Supplemented by sensitivities
- ◆ Base case used to analyse the supply-demand position
  - ◆ Gas, electricity and the interaction between the two
- ◆ Output revolves around the need for gas demand response

# Winter Outlook Report

## Example of analysis

### 1 in 10 Cold Load Duration Curve Analysis for 2005/06



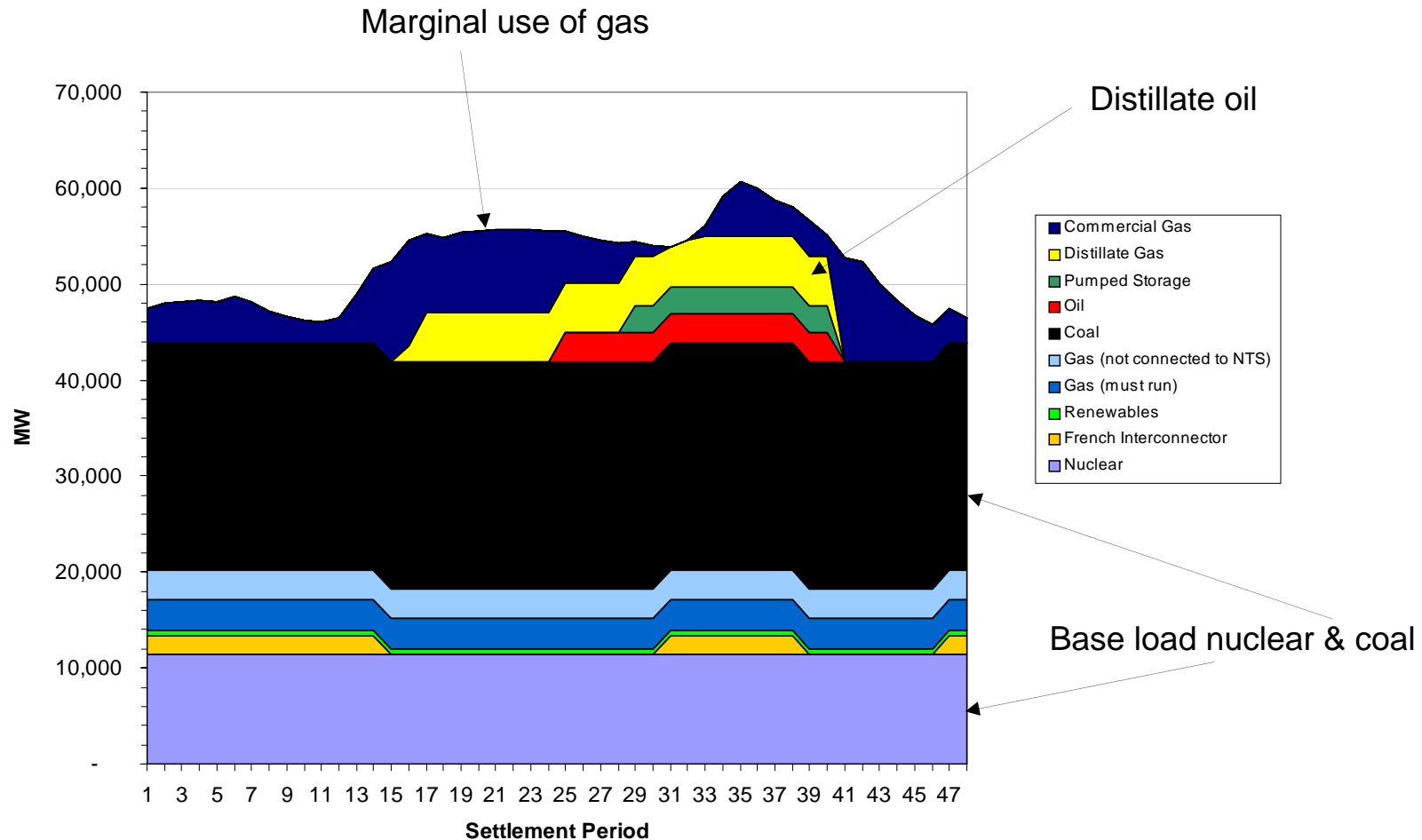
# Interaction between gas and electricity

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- ♦ Gas and electricity markets modelled together
- ♦ Estimates ability of CCGT sector to reduce demand
  - ♦ Results are at the “optimistic end of possibilities”
- ♦ Takes account of:
  - ♦ Real weather patterns
  - ♦ Half-hourly electricity demand
  - ♦ Anticipated generator availability
  - ♦ Daily gas demand
  - ♦ Anticipated gas supply

# Interaction between gas and electricity

## Potential cold day electricity generation profile



# Interaction between gas and electricity

## Implications

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Winter severity	Estimated demand-side response required (bcm)	Potential contribution from CCGT sector (bcm)	Approximate residual requirement as percentage of non-power DM market sector
Average	0.1	0.1	None
1 in 10 cold	2.2	1.3	30% on average over 40 days
1 in 50 cold	3.7	1.8	50% on average over 50 days