Winter 2006/07 Seminar

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    - UKCS
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- Key consultation questions

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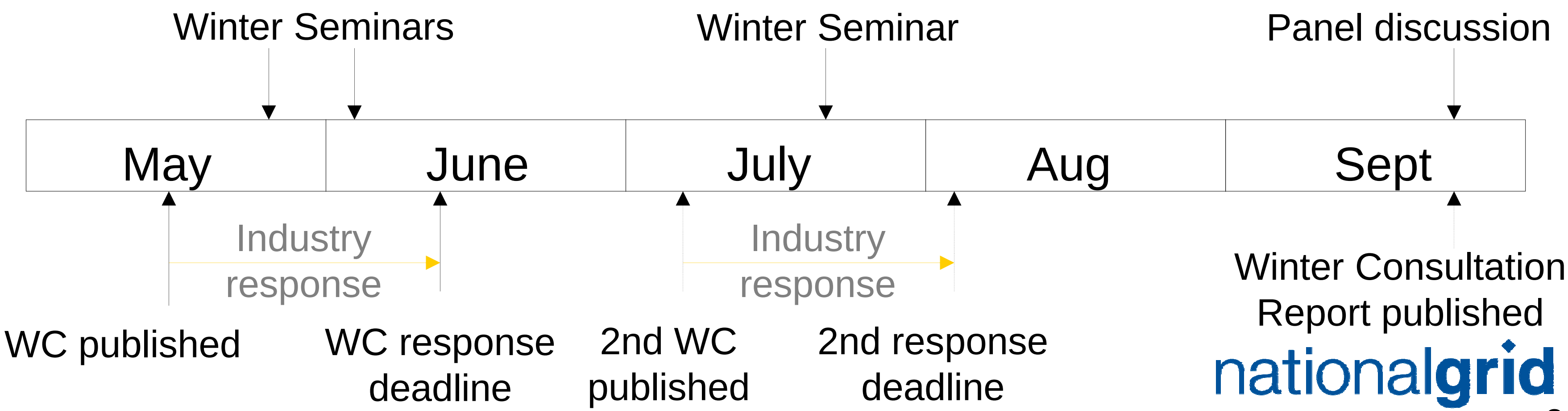
Winter Consultation process

- National Grid's information necessarily incomplete; **industry feedback crucial**
- In conjunction with Ofgem enhanced consultation process and industry engagement
- Scenarios / base case presented to stimulate comment and discussion; they are not our predictions



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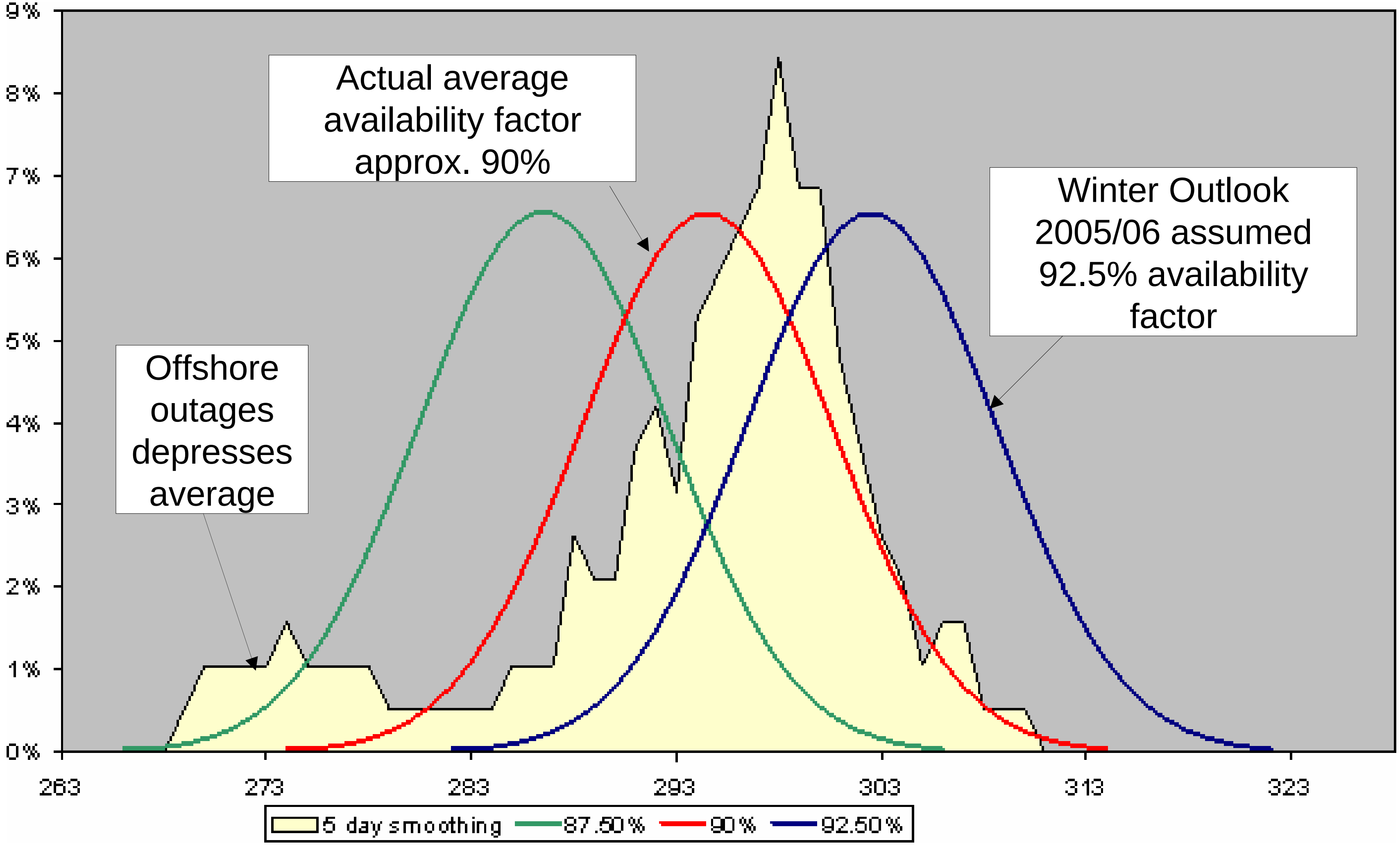
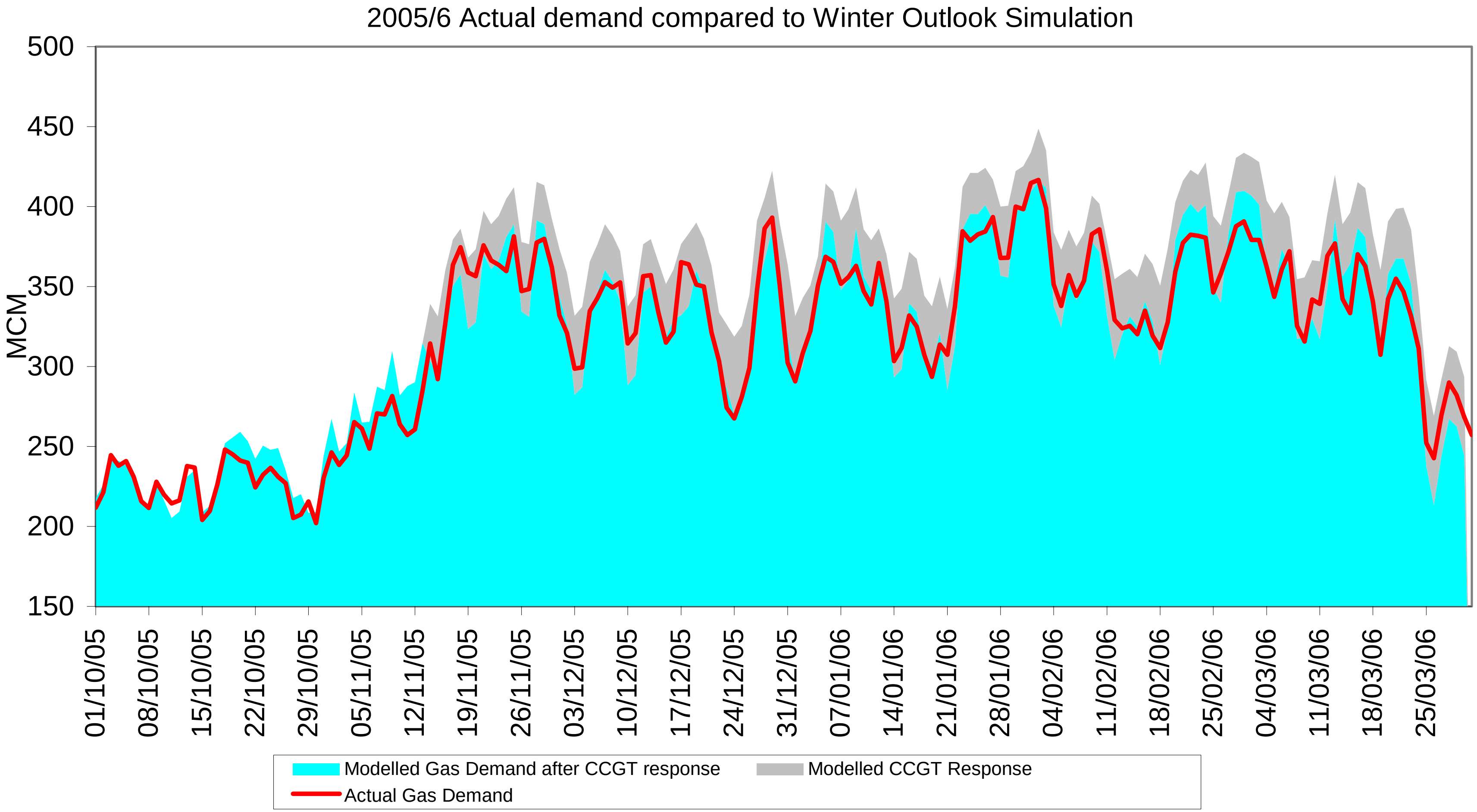
Beach performance – 2005/06



2005/06 demand v pre-winter simulation



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2005/06 demand response
Overview by market sector

Sector	Comment
NTS Power Stations	Contributed the majority of the demand response: around 20 mcm/d on average, and up to approximately 40 mcm/d when the gas price was at its highest
NTS Industrial Loads	Around 3-4 mcm/d of response evident when the gas price was at its highest
LDZ Daily Metered (DM) Interruptible	Around 5-10 mcm/d was evident when the gas price was at its highest
LDZ Daily Metered (DM) Firm	Around 2 mcm/d of response observed when gas prices were particularly high in March
LDZ Non-daily Metered (NDM)	Demand depressed generally, but (as would be expected) not in response to price spikes

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Winter 2006/07 preliminary analysis

- High level of uncertainty for 2006/07
  - UKCS decline
  - Market response; import infrastructure

  Extent / timings uncertain
- Interaction between demand and supply considered; analysed using a base case and range of sensitivities
- Analysis identifies and quantifies the level of demand side response required

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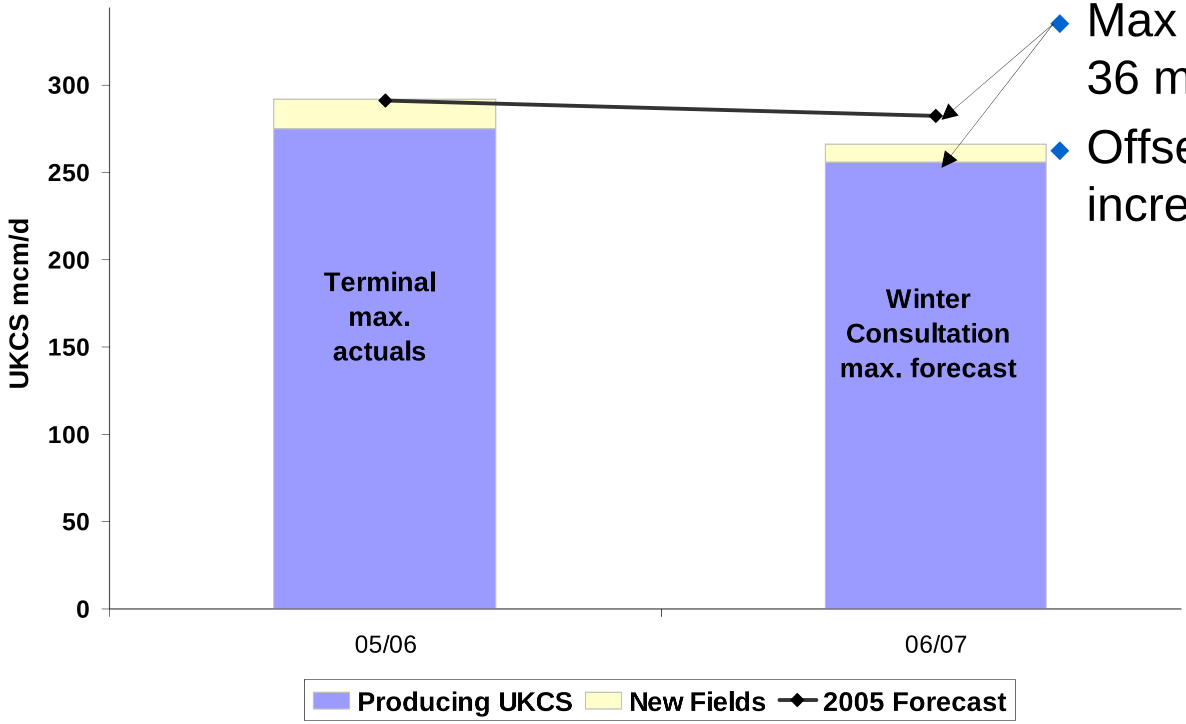
Winter 2006/07 base case - UKCS
Preliminary figures based on 2005 TBE forecasts



- Max forecast assumes decline of 36 mcm/d from existing fields
- Offset by 10 mcm/d from incremental developments

- Peak forecast 266 mcm/d
- Base case incorporates 90% average availability (240 mcm/d)

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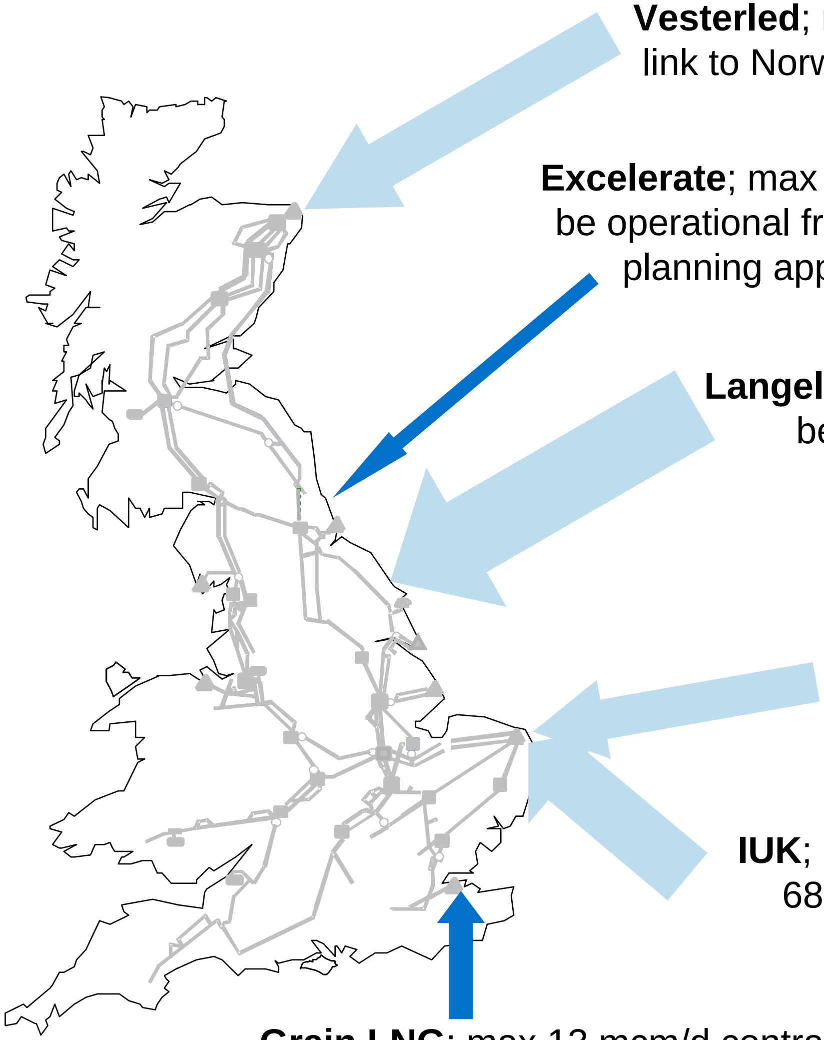
Winter 2006/07; import infrastructure



Vesterled; max 36 mcm/d. Existing link to Norwegian continental shelf

Excelerate; max 11 mcm/d. Scheduled to be operational from Dec 2006 subject to planning approval and consents

Langeled; max 68 mcm/d. Scheduled to be operational from Oct 2006

BBL; max 30 mcm/d. Scheduled to be commissioned Dec 2006. Increase to max 42 mcm/d planned for March 2007

IUK; max 48 mcm/d. Increase to max 68 mcm/d planned by Dec 2006

Grain LNG; max 13 mcm/d contracted deliverability; max 17 mcm/d physical capability

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Base case supply assumptions

- Wide range of potential supply availability
- Base case created to provide reference point for comment

	2005/06 Base Case Assumption	May 2006 Base Case for consultation purposes only
UKCS	269 (291 @ 92.5%)	240
Norway	33 (36 @ 92.5%)	48
IUK	42 (revised to 30)	35
BBL	N/A	20
LNG imports	13	13
Total	357	356

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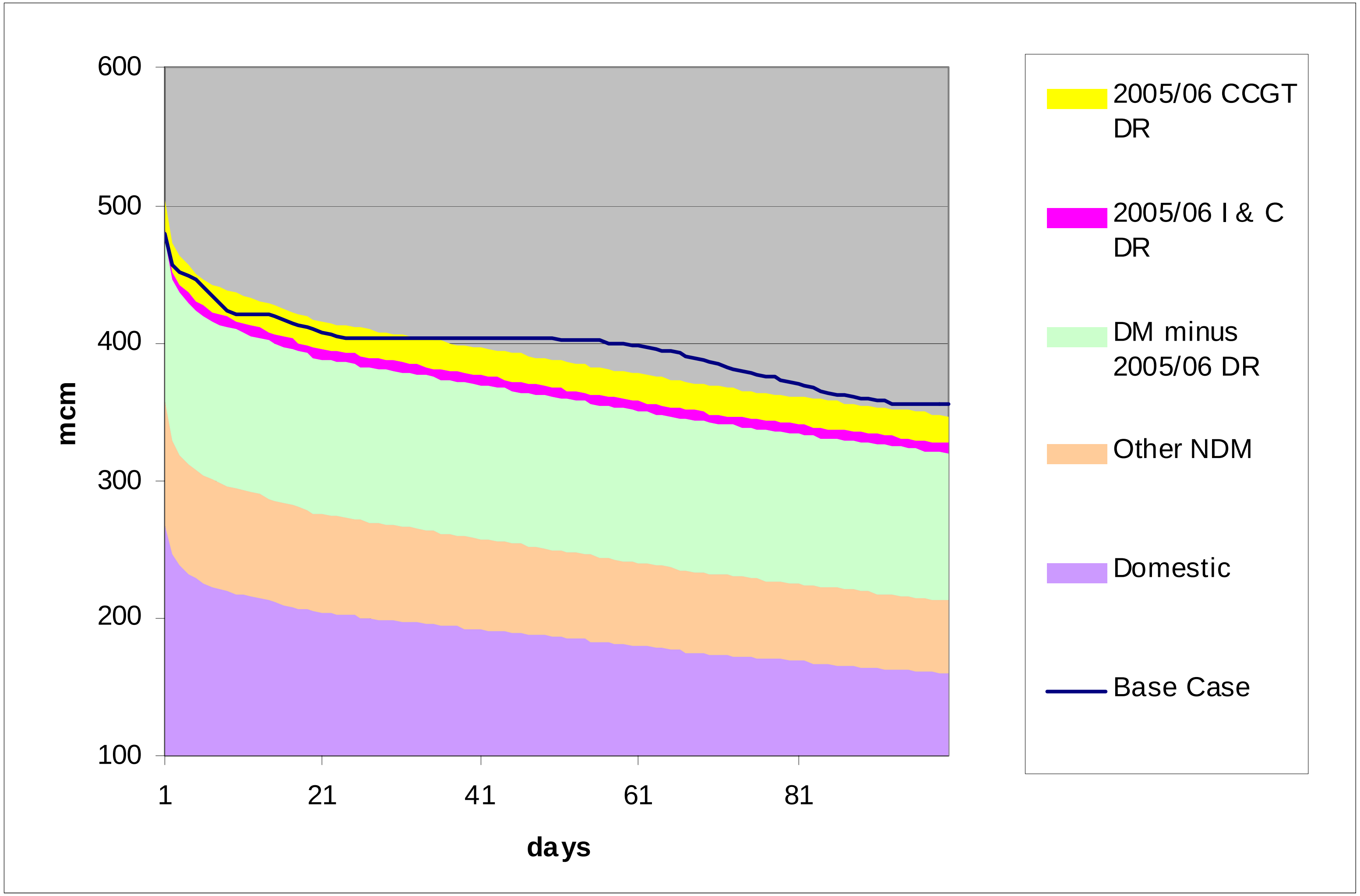
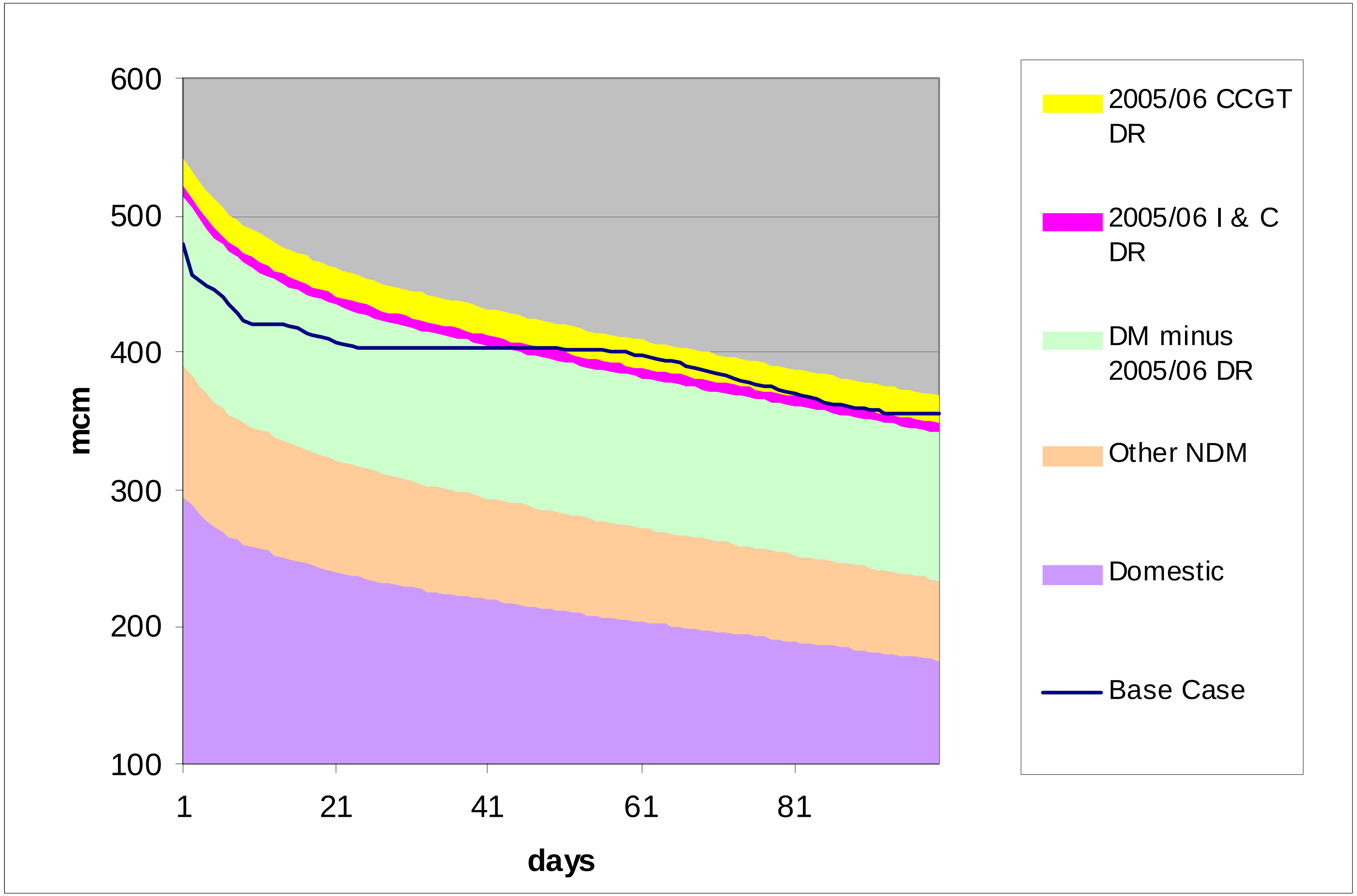
Illustrative supply-demand position
Average load duration curve for winter 2006/07

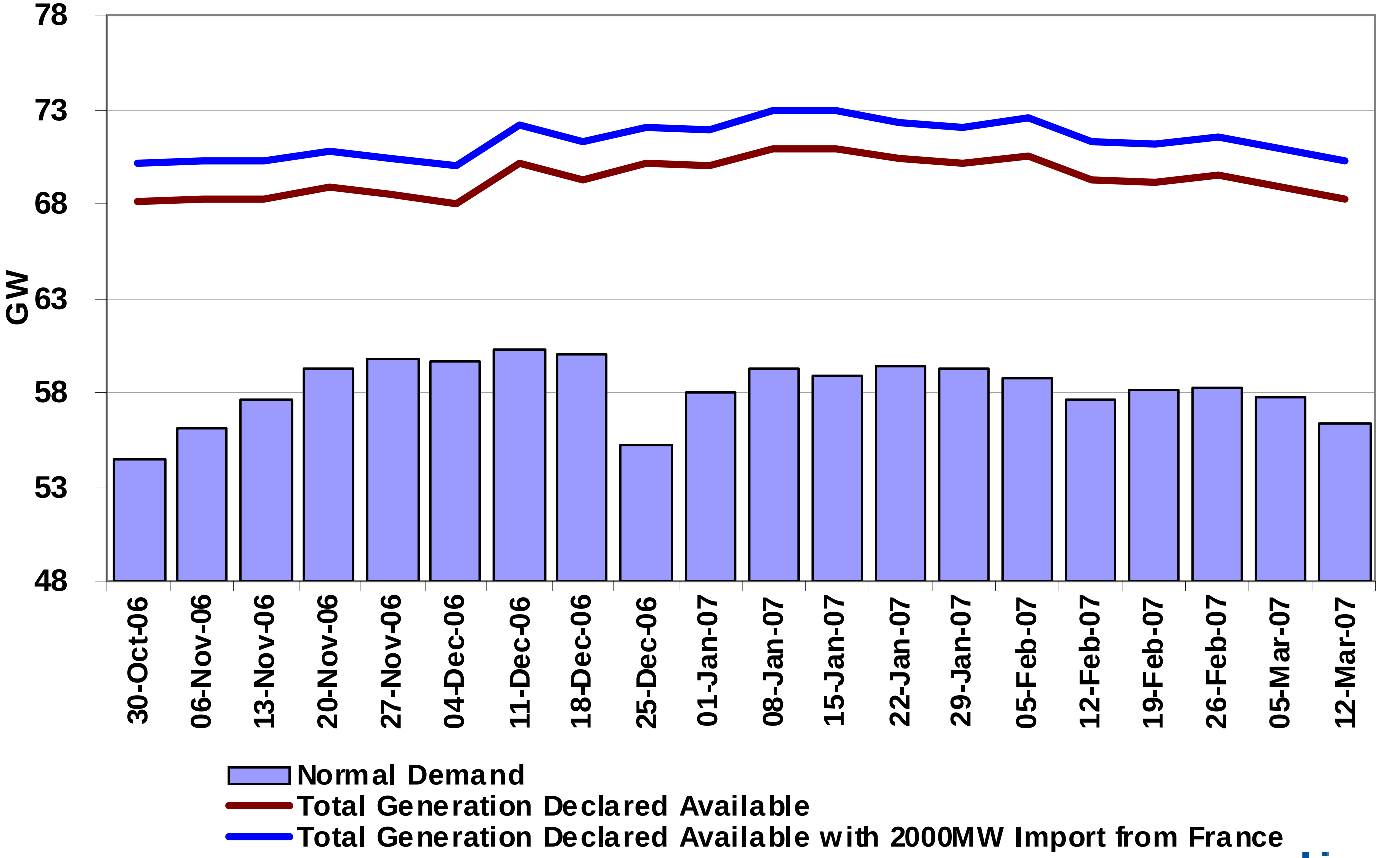


Illustrative supply-demand position
1 in 10 load duration curve for winter 2006/07

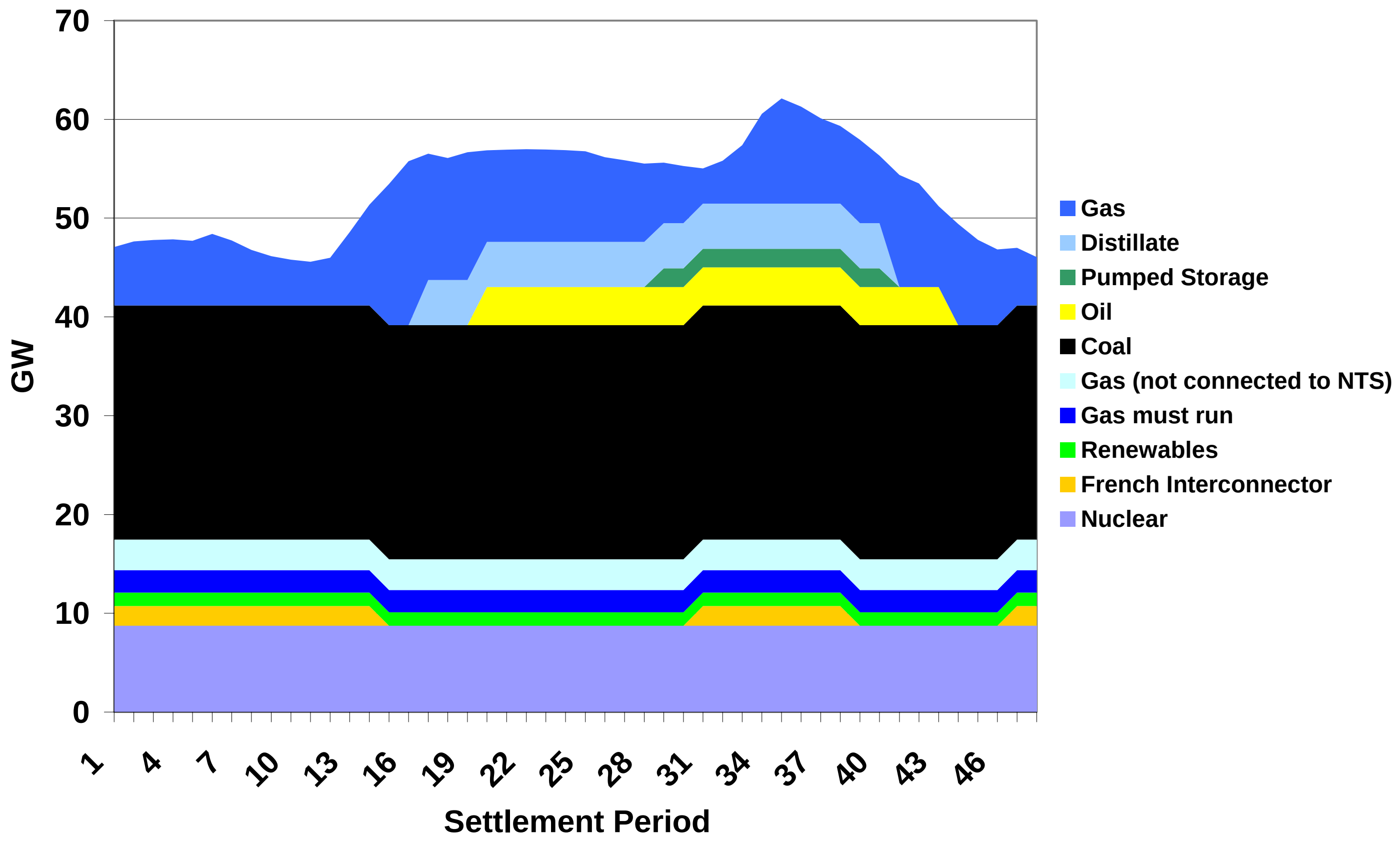


Demand and notified generator availability

- With full imports from France the excess generation over average weekly peak demand would be around 12-14 GW



Potential demand response
Simulated generation profile



Potential demand response
Required response and potential CCGT contribution

- All figures in bcm

	Average	1 in 10	Severe
Required	0.3	3.1	5.0
Potential CCGT	0.3	2.1	2.7
Non-CCGT	0.0	1.0	2.3

Key consultation questions

What assumptions are appropriate?

- Gas supply outlook
  - UKCS
  - Imports; new infrastructure, market issues
  - Storage; safety monitors
- Electricity
  - Mothballed plant, French Interconnector, demand management
- Demand response
  - Non-CCGT; including NDM
  - CCGT

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