

Winter 2006/07 Consultation Update

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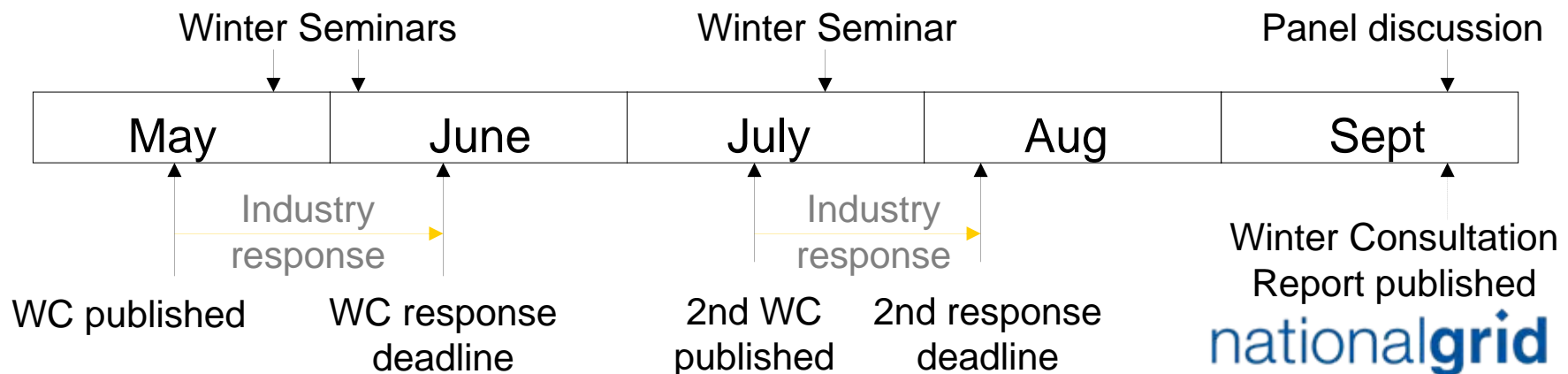
20 July 2006

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 - ◆ Key consultation questions

Winter Consultation process

- ◆ National Grid's information necessarily incomplete; **industry feedback crucial**
- ◆ Scenarios / base case presented to stimulate comment and discussion; Update document reflects industry's views
- ◆ 33 responses received to the May consultation



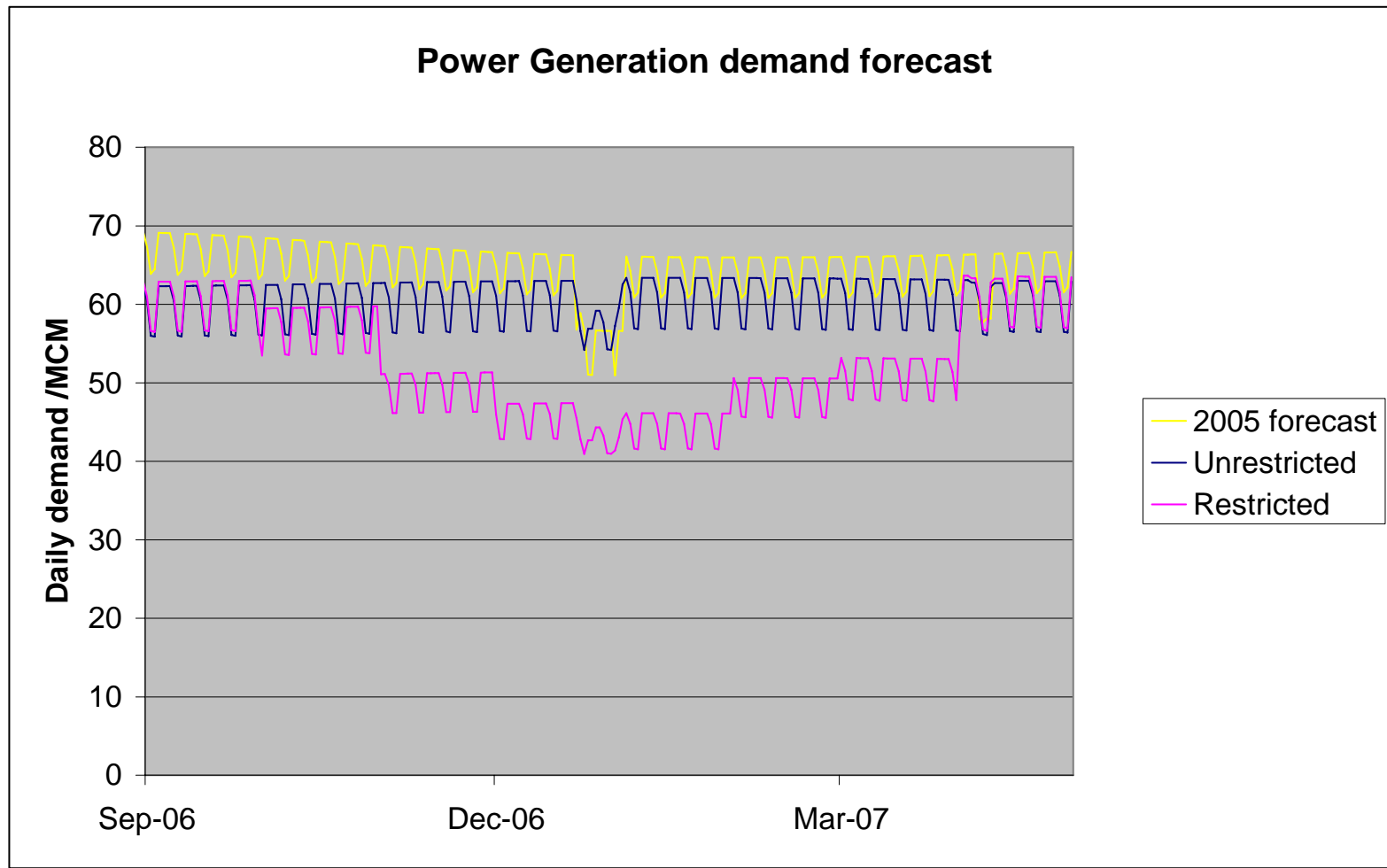
Winter 2006/07 revised analysis

- ◆ Responses to May Consultation
 - ◆ Data received through TBE
- } Shaped revised analysis
- ◆ High level of supply uncertainty remains
 - ◆ Demand forecasts materially lower
- ◆ Interaction between demand and supply considered; analysed using a revised base case and range of sensitivities
 - ◆ Analysis identifies and quantifies the level of demand-side response required

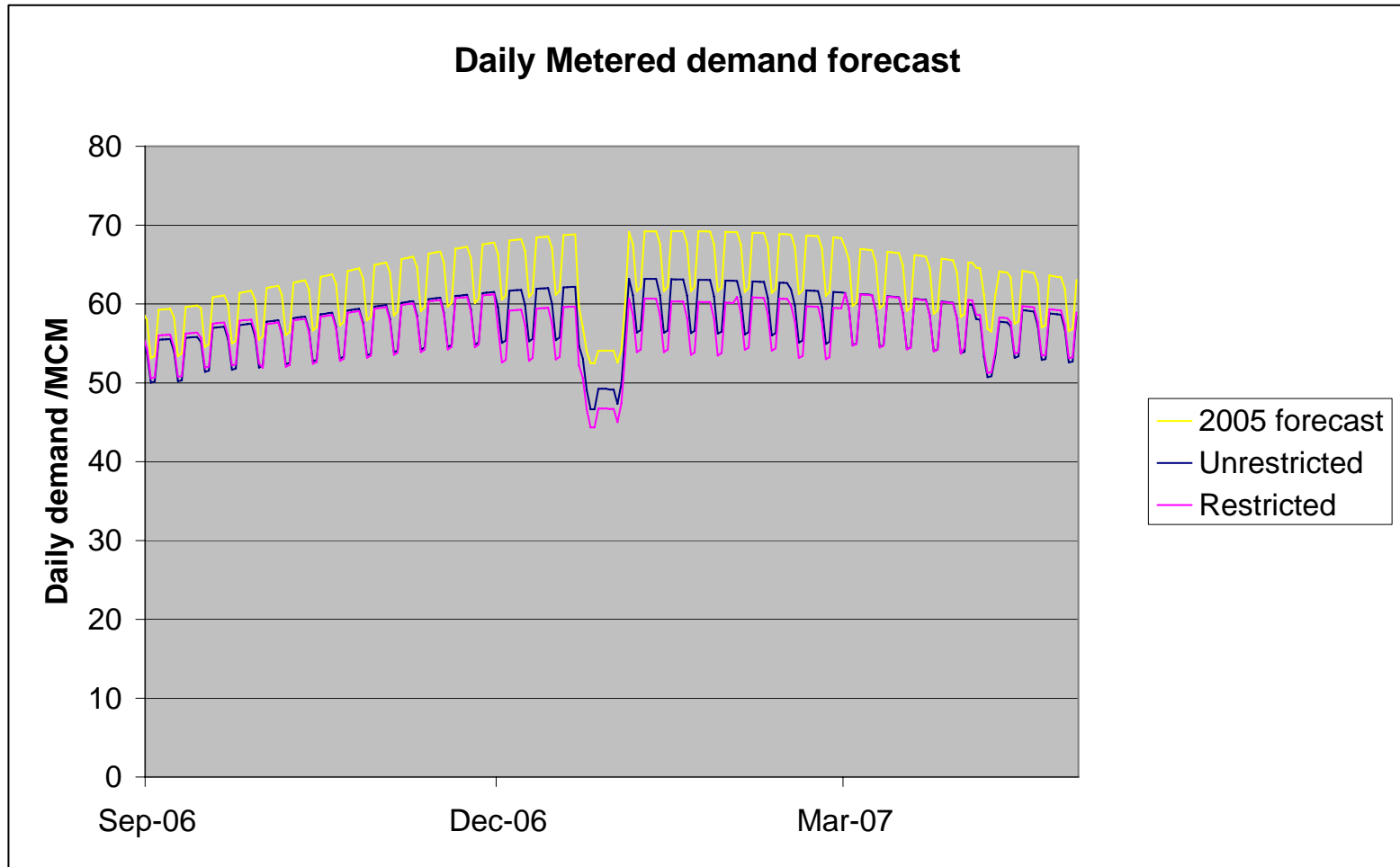
Revised demand forecasts

- ◆ Overall demand forecasts materially lower than those that underpinned analysis in the May document
 - ◆ Driven by expectation of high prices throughout winter 2006/07
- ◆ Revised NDM forecast; reflects reduction in demand experienced last year
 - ◆ Expect year-on-year decline of 2%
 - ◆ Validated against historical data; but uncertainty remains whether consumer behaviour would alter in the face of prolonged cold conditions
- ◆ Revised DM forecast
 - ◆ Creation of 'restricted' forecast to take account of response to high spot prices

Power generation demand forecast



Daily Metered demand forecast



Revised base case for consultation

Non-storage supply assumptions

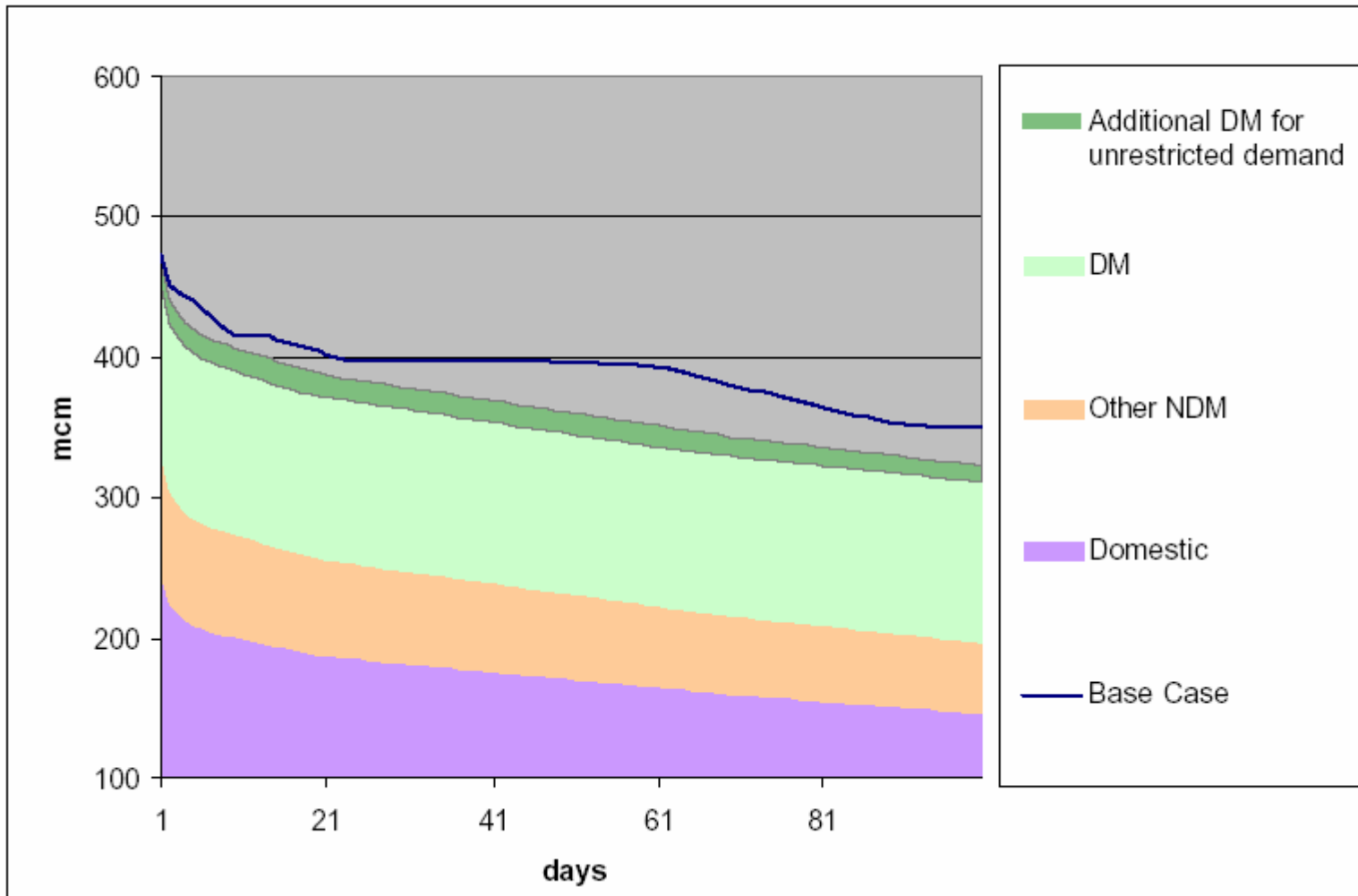
- ◆ Respondents broadly supported the level of UKCS supplies proposed and recognised split pre / post Christmas associated with imports

	2005/06 Base Case Assumption	May 2006 Base Case for consultation purposes only	Revised Base Case for consultation purposes only	
			Oct - Dec	Jan - Mar
UKCS	269 (291 @ 92.5%)	240 (266 @ 90%)	240	240
Norway	33 (36 @ 92.5%)	48	48	48
IUK	42 (revised to 30)	35	25	40
BBL	N/A	20	0	20
LNG imports	13	13	13	13
Total	357	356	326	361

All figures in mcm/d

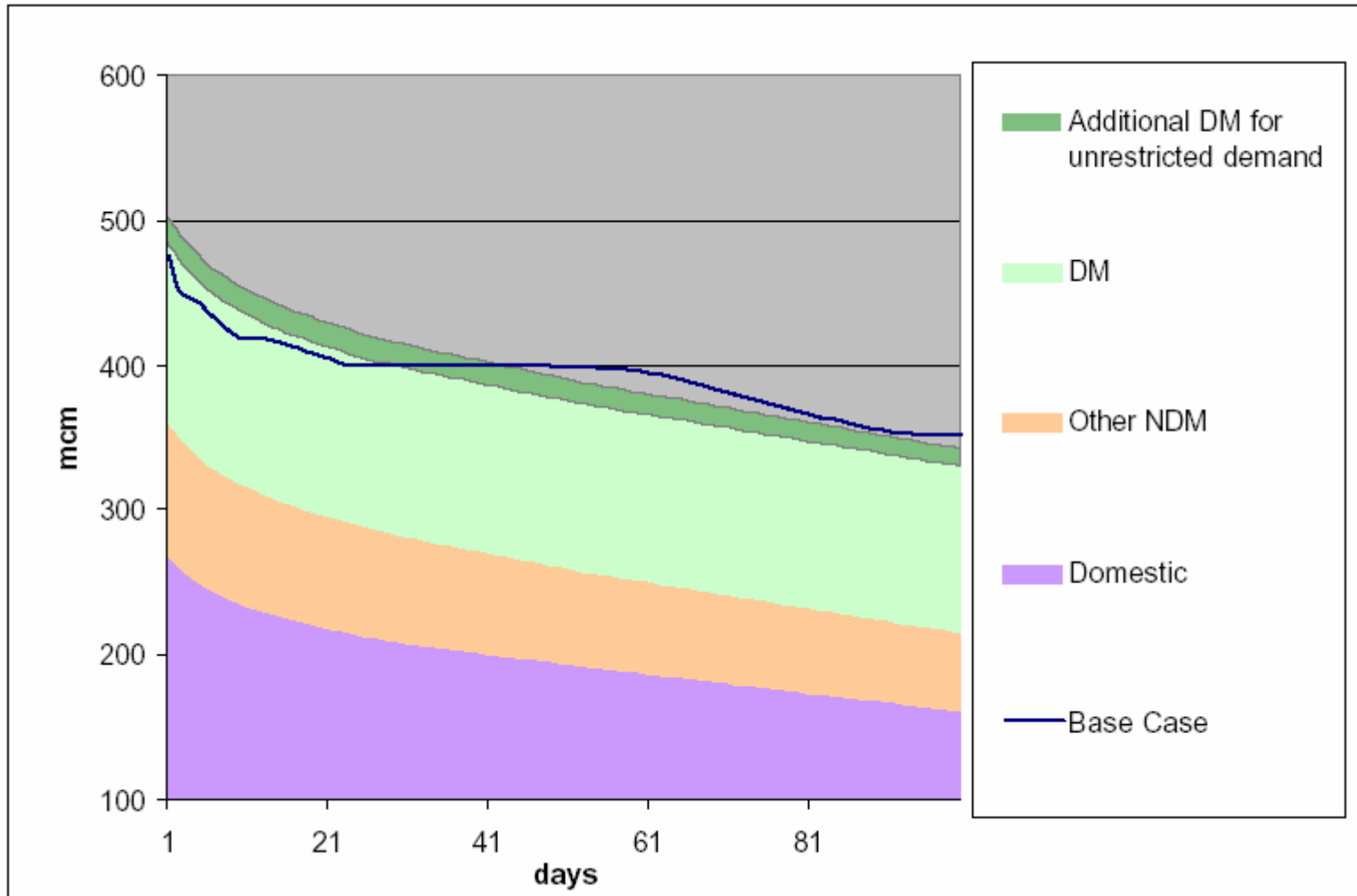
Illustrative supply-demand position

Average load duration curve for winter 2006/07



Illustrative supply-demand position

1 in 10 load duration curve for winter 2006/07



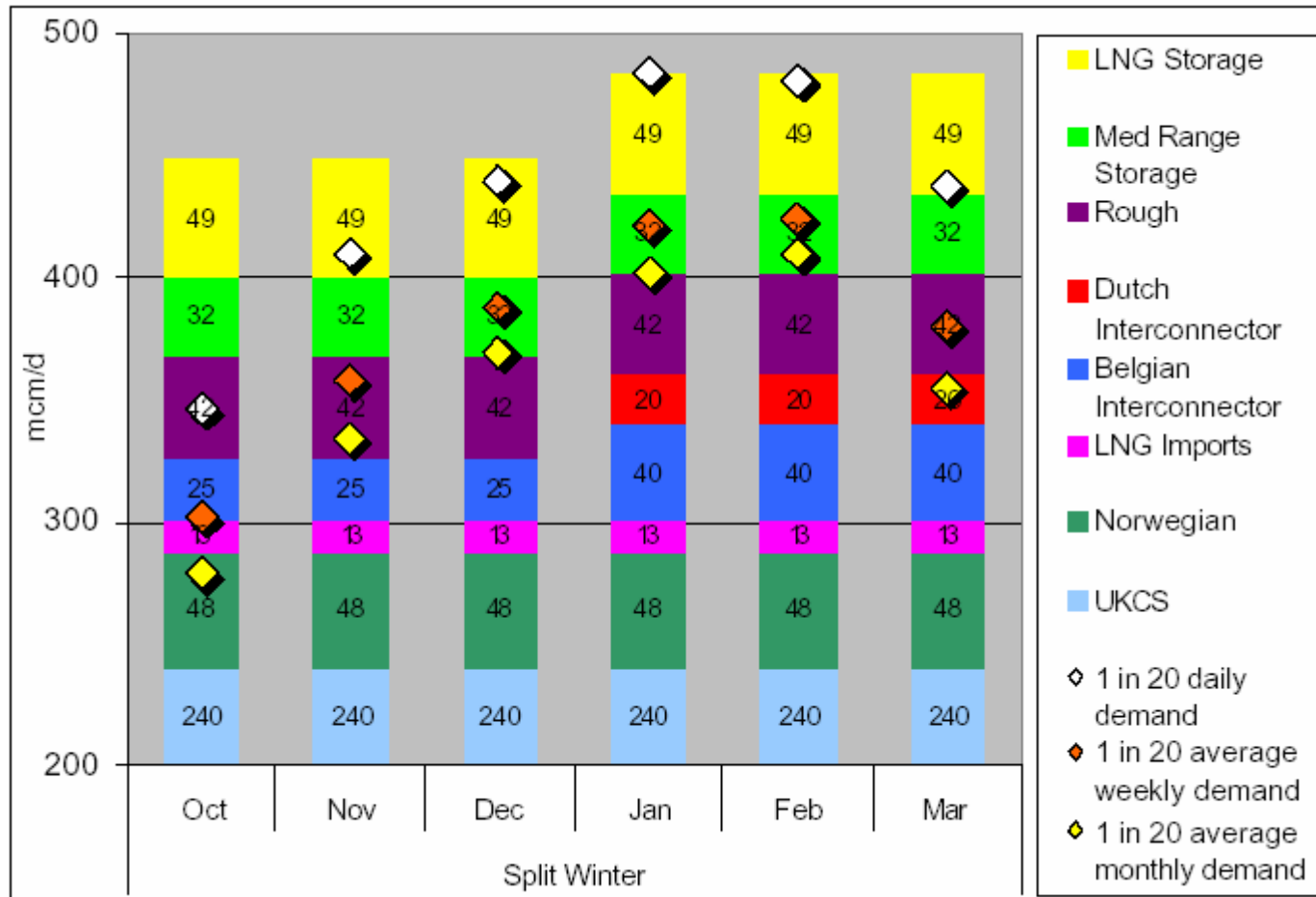
Demand response requirements

	Average	1 in 10	1 in 50
Base case: total demand response required (restricted)	0.0	0.4	1.3
Base case: total demand response required (unrestricted)	0.0	1.0	2.4
May 2006 base case: total demand response required	0.3	3.1	5.0

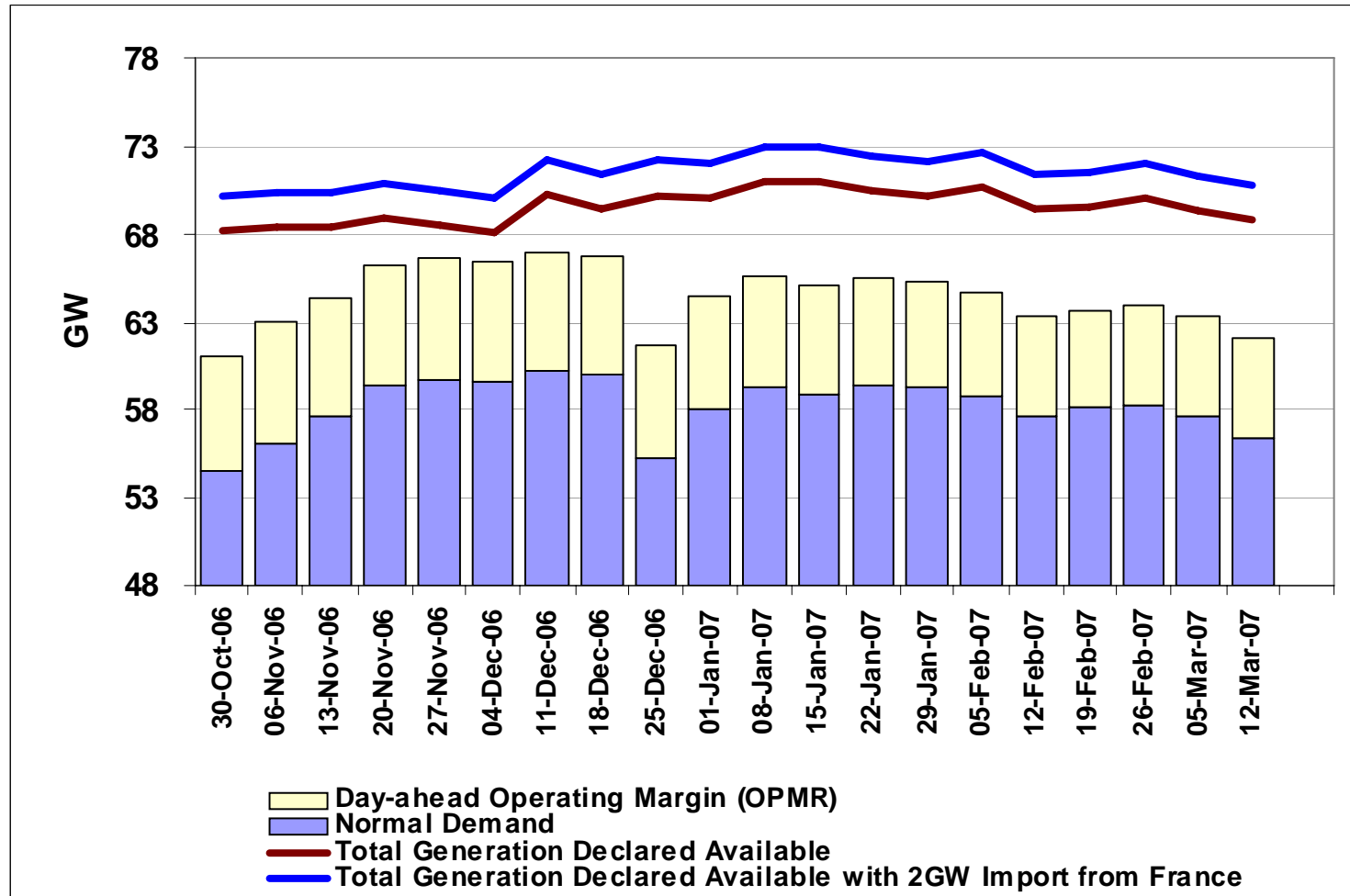
All figures in bcm

Revised base case supply conditions

Monthly cold spell analysis



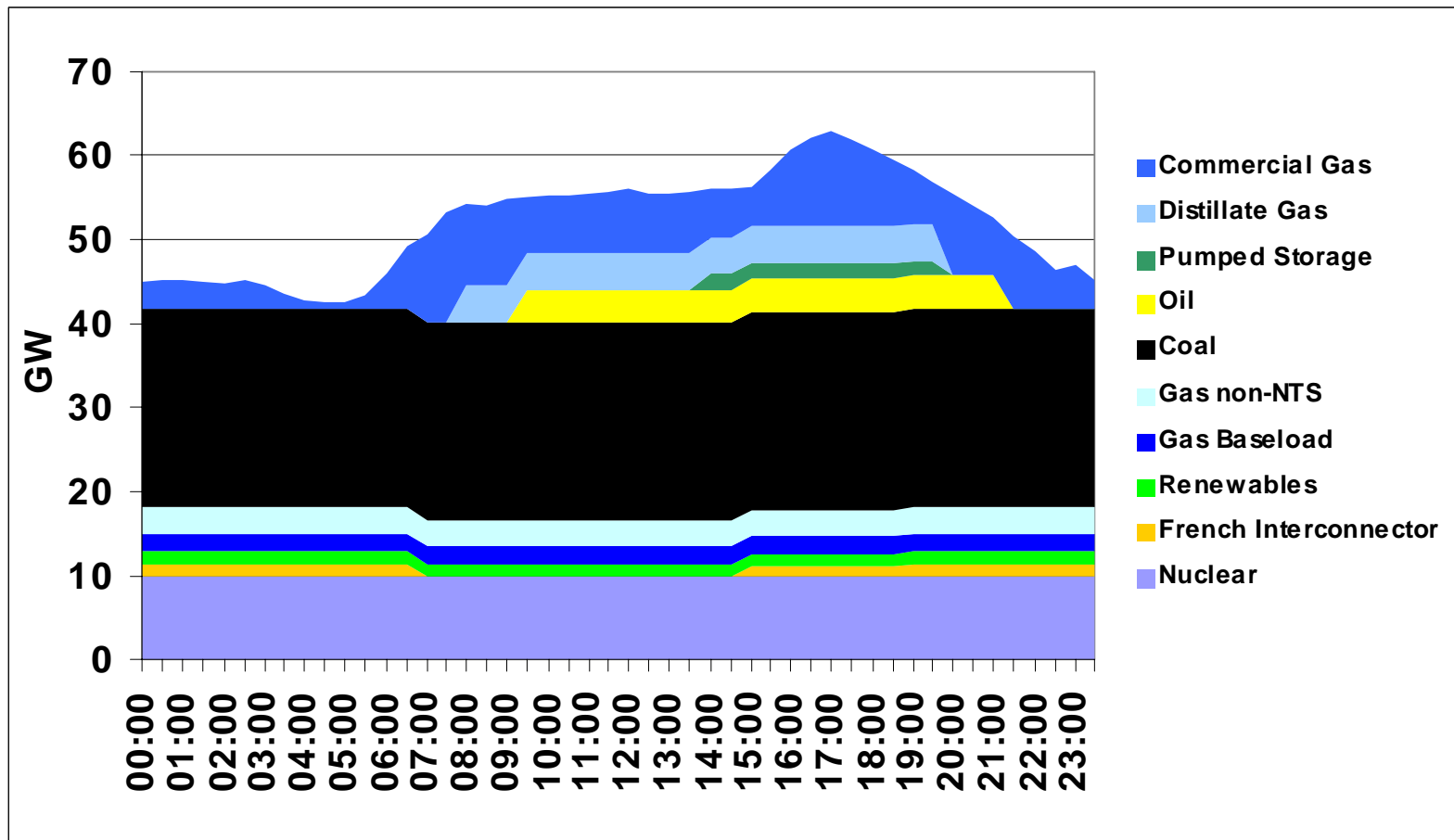
Demand and notified generator availability



Potential demand response

Simulated generation profile

- ◆ Modelling assumptions and assumed availability's revised based on further analysis and Consultation responses



Potential demand response

Required response and potential CCGT contribution

- ◆ Unrestricted gas demand background

	Average	1 in 10	1 in 50
Required	0.0	1.0	2.4
Potential CCGT	0.0	0.6	1.3
Non-CCGT	0.0	0.4	1.1

All figures in bcm

- ◆ Restricted gas demand background

	Average	1 in 10	1 in 50
Required	0.0	0.4	1.3
Potential CCGT	0.0	0.0	0.3
Non-CCGT	0.0	0.4	1.0

All figures in bcm

Study into the feasibility of blending at Bacton

- ◆ Ofgem requested National Grid undertake a review of the technical and operational feasibility of providing gas blending at Bacton
- ◆ Advantica conducted technical evaluation to determine;
 - ◆ whether sufficient mixing of gas takes place within the Bacton terminal
 - ◆ the potential range in composition of gas exiting the terminal
- ◆ National Grid assessed safety & operational issues

Blending service for winter 2006/07

- ◆ Advantica study indicates there is a capability for gas to mix. However, not possible for this winter due to ...
 - ◆ Design and engineering study required for suitable measurement and control system
 - ◆ Upgrades to Bacton gas measurement system required
 - ◆ HSE approval of required changes to safety case
 - ◆ Commercial arrangements need to be considered
- ◆ National Grid propose to continue to assess the potential for blending services at Bacton and elsewhere on the NTS for winter 2007/08
 - ◆ Update to be provided in the Winter Consultation Report

Conclusion

We need your views;

- ◆ Revised gas demand forecasts
 - ◆ Particularly gas suppliers' expectations for demand in the NDM sector under severe weather conditions
 - ◆ New restricted demand forecasts
 - ◆ Demand-side response
- ◆ Gas supply uncertainties
 - ◆ Particularly regarding importation infrastructure
 - ◆ Revised UKCS forecasts
 - ◆ Revised base case
 - ◆ Within winter variations
- ◆ Electricity
 - ◆ Revised modelling assumptions
 - ◆ Revised CCGT analysis