Winter Outlook

Andrew Ryan

12 October 2005

Agenda

- Context
- May 2005 Consultation
- Autumn 2005 Report
- Electricity Outlook
- Gas Balance
- Electricity – Gas Interaction
- Implications for Gas market

Context

- UKCS production is continuing to decline
- New importation and storage infrastructure is expected
  - Expansion of the Belgian Interconnector - November 2005
  - Grain LNG - first shipment summer 2005
  - Humbly Grove storage facility - recently commissioned
- 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

- 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
- Feedback gratefully received
- 15 responses, qualitative rather than quantitative
- No clear consensus but useful as a guide

nationalgri

Autumn Winter Outlook Report

- Published by Ofgem last week
- 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
- Requirement for non-CCGT gas demand response remains under severe weather conditions

nationalgri

Electricity Outlook

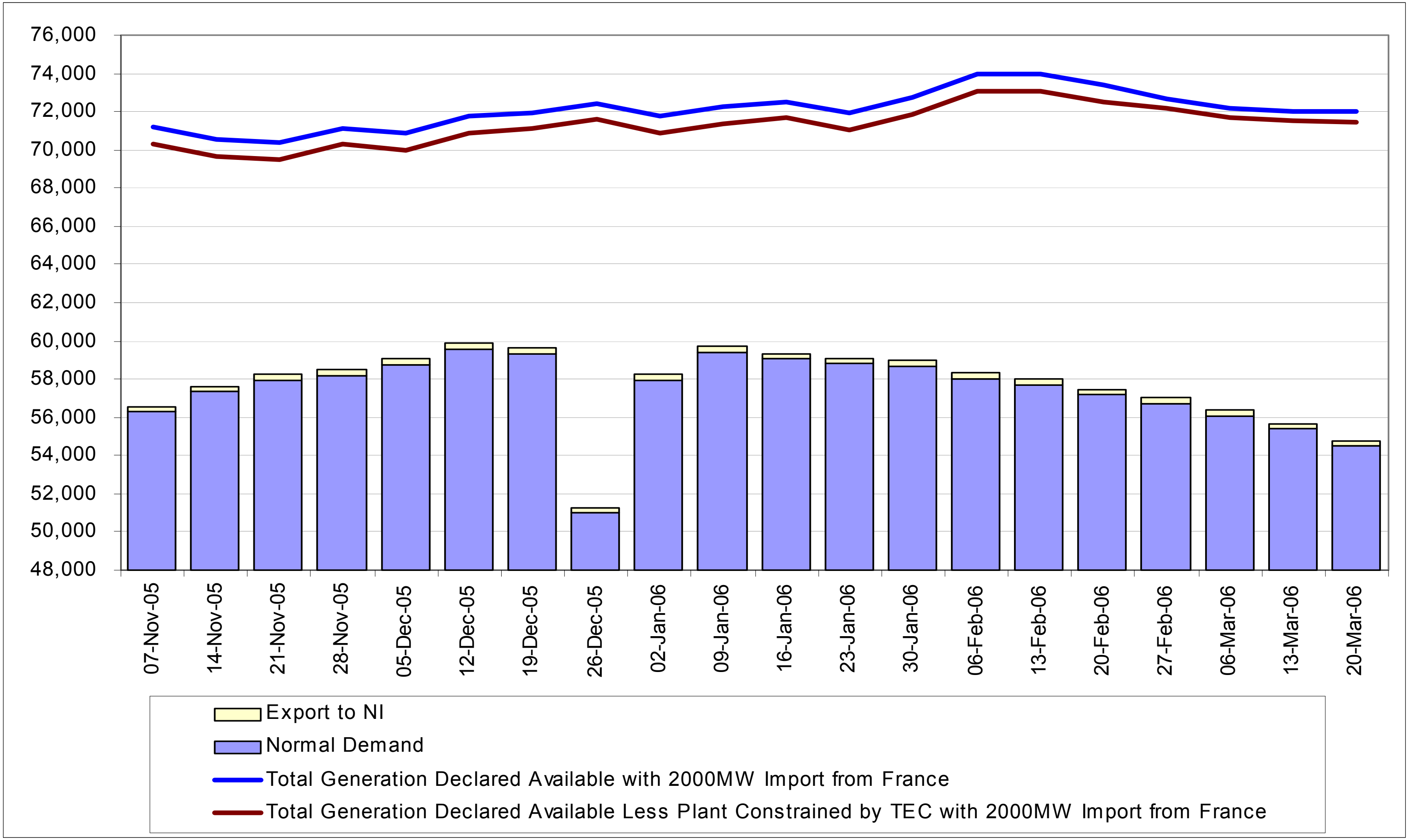
- Plant Margin is 21%, based upon 7 Year Statement update.
- Customer Based ACS Demand Forecast of 62.6 GW
- National Grid ACS Demand Forecast of 61.9 GW, including 0.4 GW flow to NI
- In severe conditions demand may increase by around 3 GW
- Around 1 GW of triad avoidance has been seen in the past and continues to be assumed in forecasts

Electricity Outlook

- Of the 74.8 GW of Transmission Contracted capacity, 0.7 GW is not declaring itself available for this winter, but could return if required
- A further 1.4 GW could return, but would have to purchase TEC
- Margin assumes 2 GW from France and full access to all Scottish generation. Actual interconnector flows and return of mothballed plant continue to be driven by the market
- Provided we do not experience exceptional plant failure/unavailability or high demand, demand should be me without Demand Control

nationalgri

Electricity Balance weekly average weather

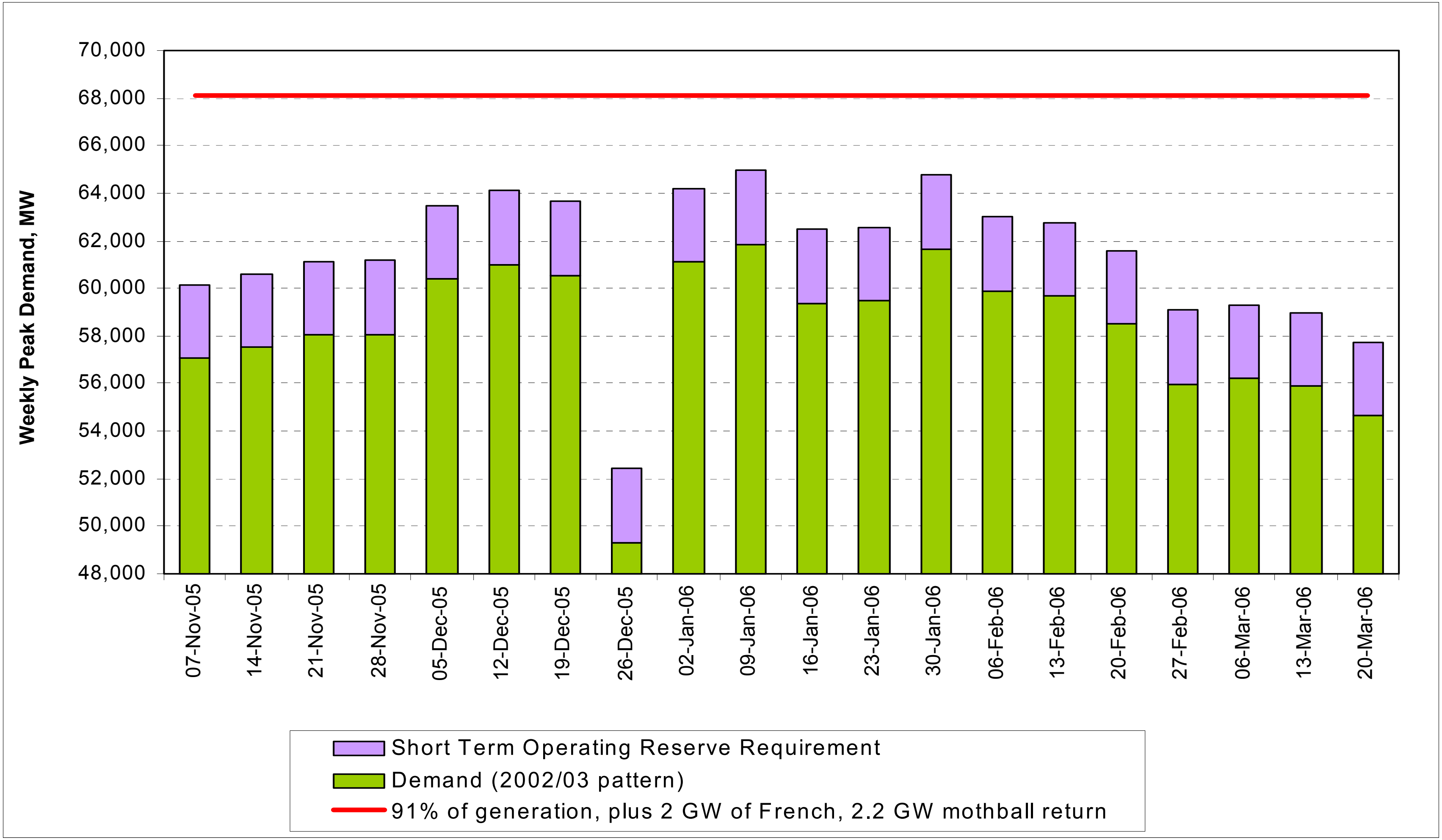


nationalgri

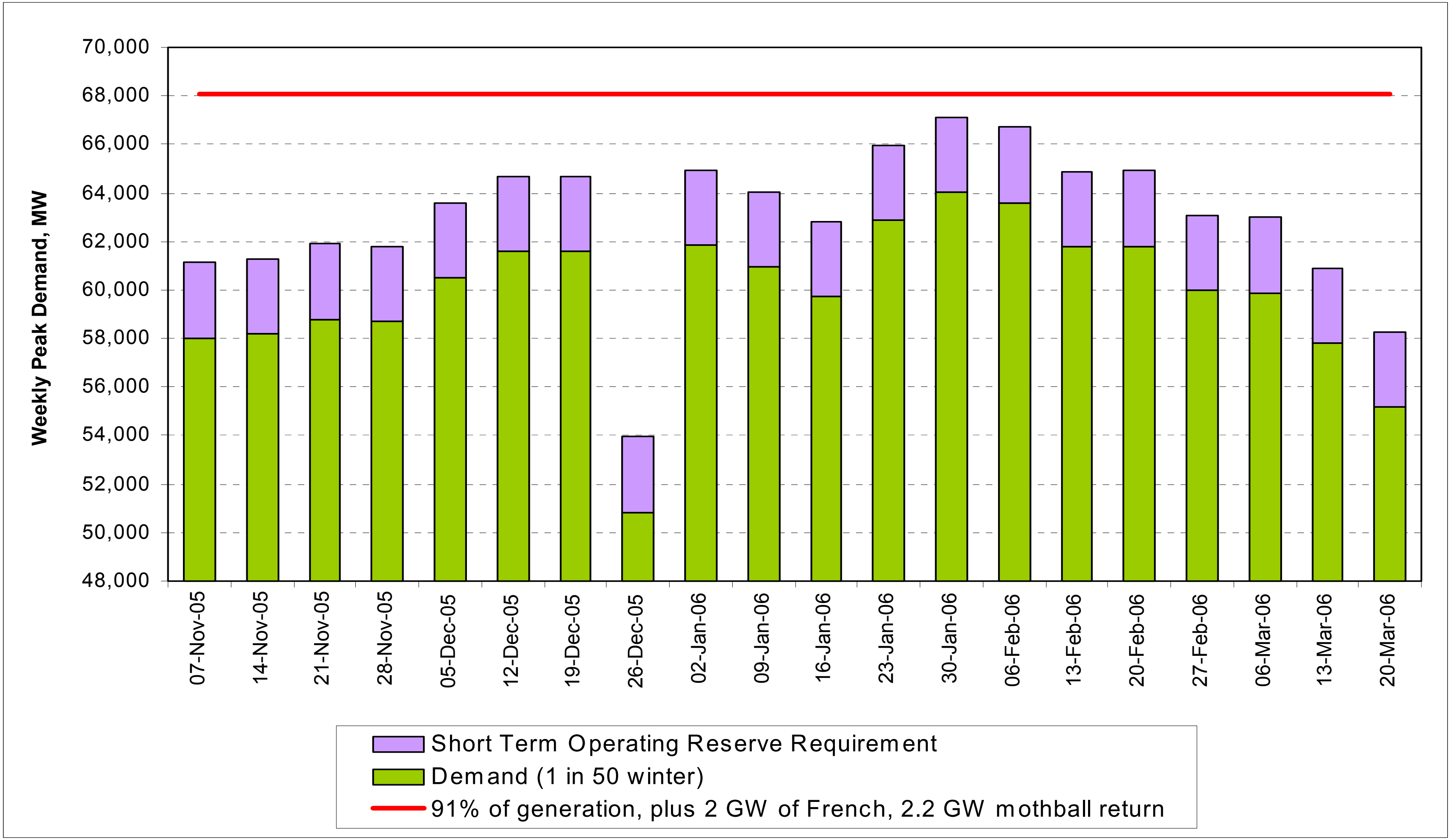
Assumed Winter Availability

Power Station Type	Assumed Availability
Nuclear	95%
French Interconnector	100%
Non-BM Generation (incl. Renewables)	50%
Coal	85%
Oil	95%
Pumped Storage	100%
CCGT	95%

Electricity Balance
typical weather



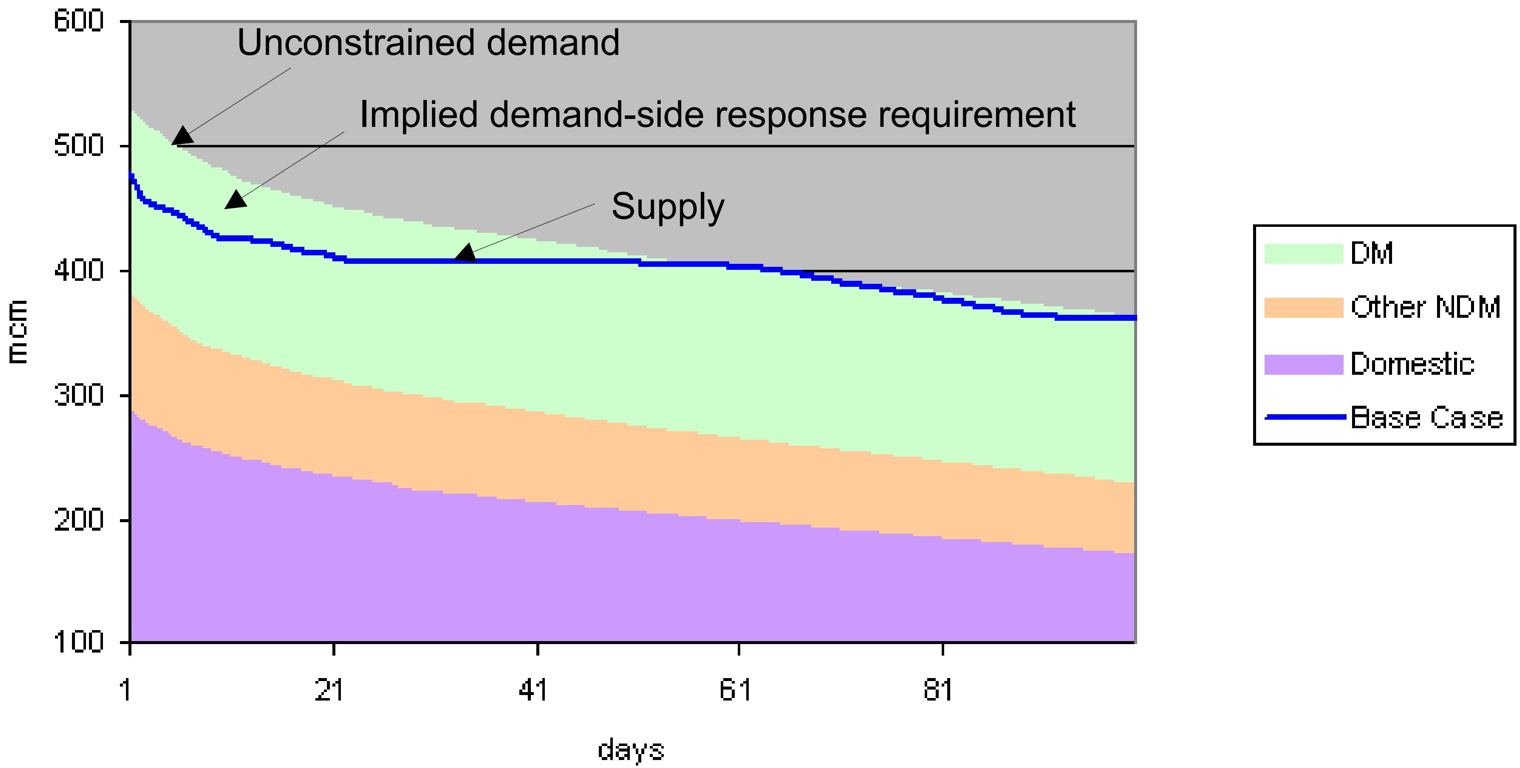
Electricity Balance
1 in 50 weather



nationalgrid

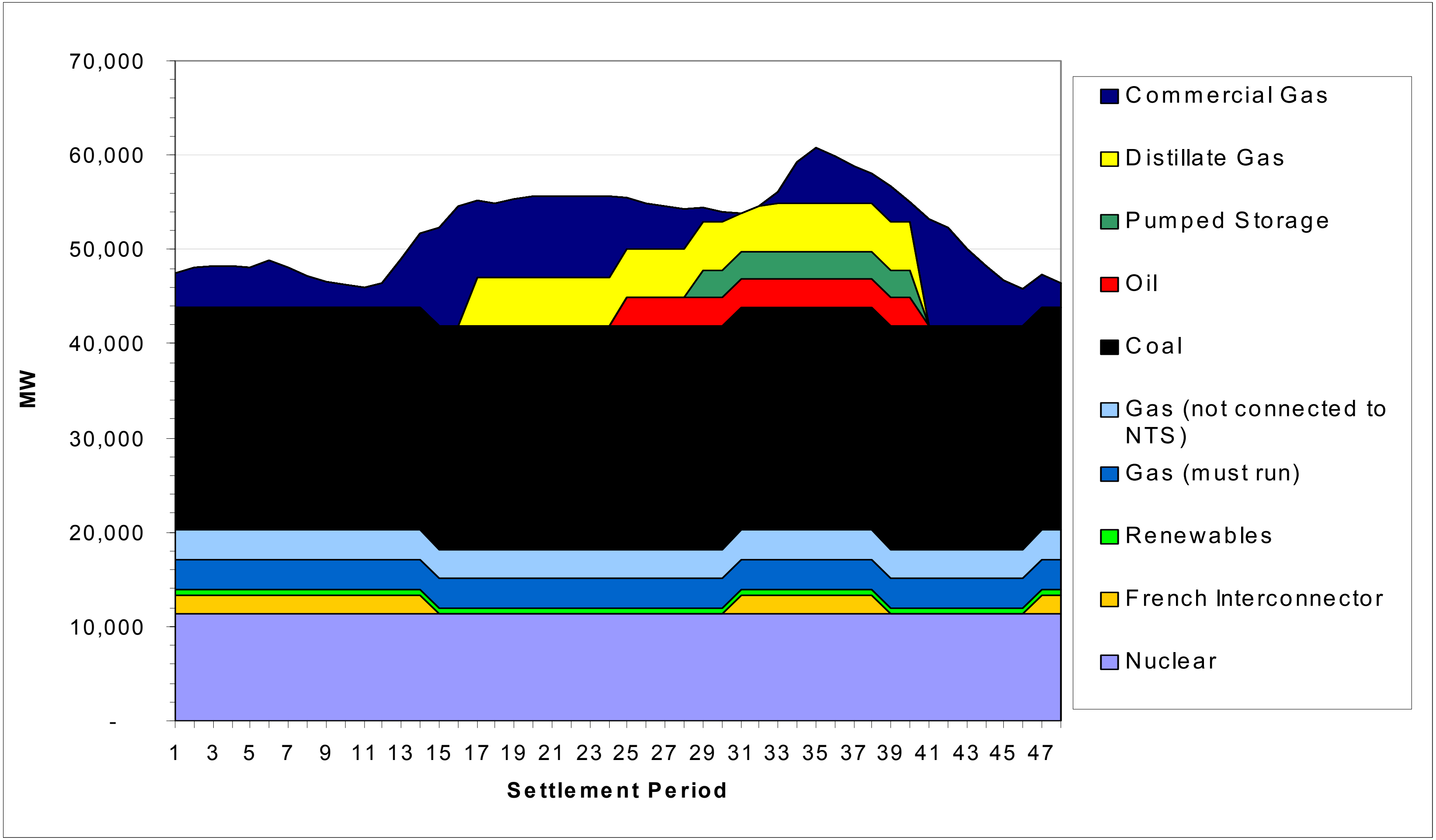
Gas Balance : 1 in 10 Winter

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



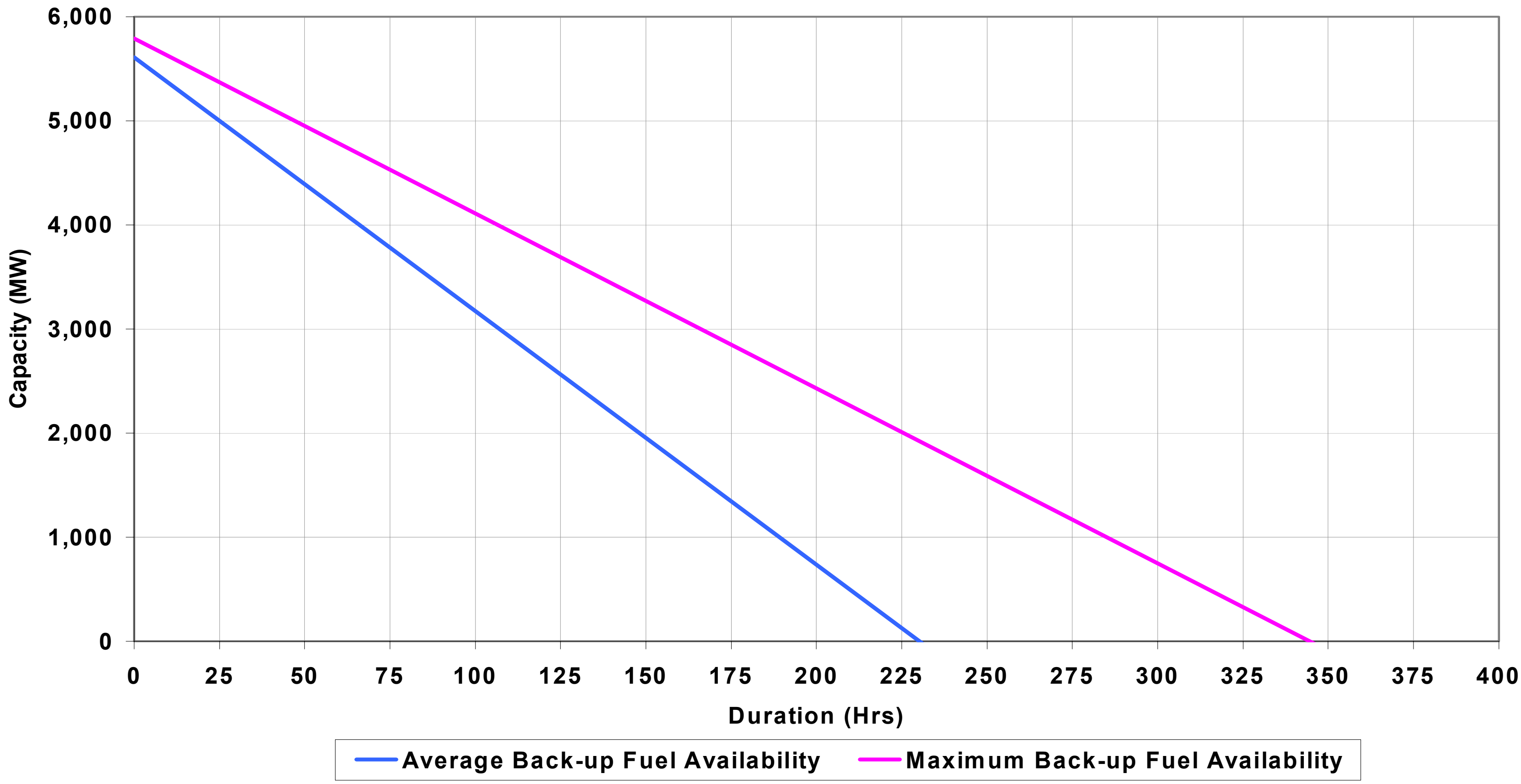
nationalgrid

Interaction between gas and electricity
Potential cold day electricity generation profile



Distillate Stocks

5.2 GW running for 200 hours



Interaction between gas and electricity
Implications for gas market

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

Summary

- Generation background is similar to last winter
  - 21% plant margin
  - 1.4 GW short-term mothballed without TEC
- Provided we do not experience exceptional plant failure/unavailability or high demand, demand should be me
without Demand Control
- Interactions between the UK and Europe, and between electricity and gas
- UKCS production is continuing to decline
- Requirement for non-CCGT gas demand response remains under severe weather conditions