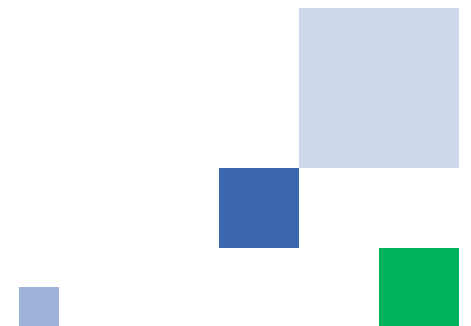


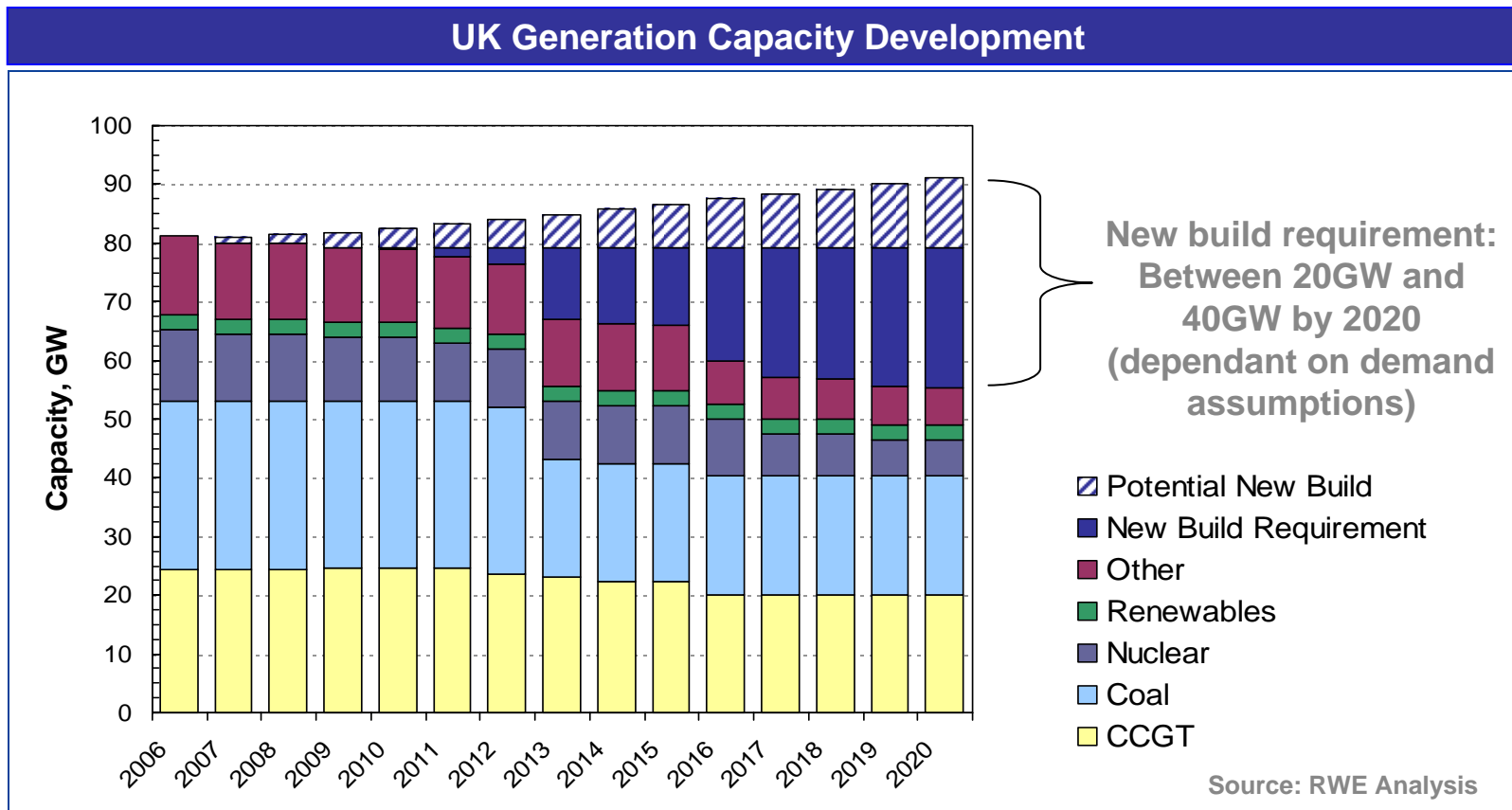
# Mind the gap..... The future of UK generation

**Westminster Energy Forum  
September 2006**

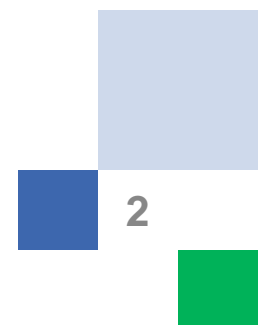
**Volker Beckers  
Group CFO, RWE npower**






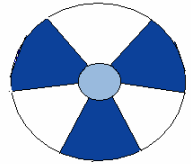
# The UK generation industry requires a sustained period of investment in new capacity.....



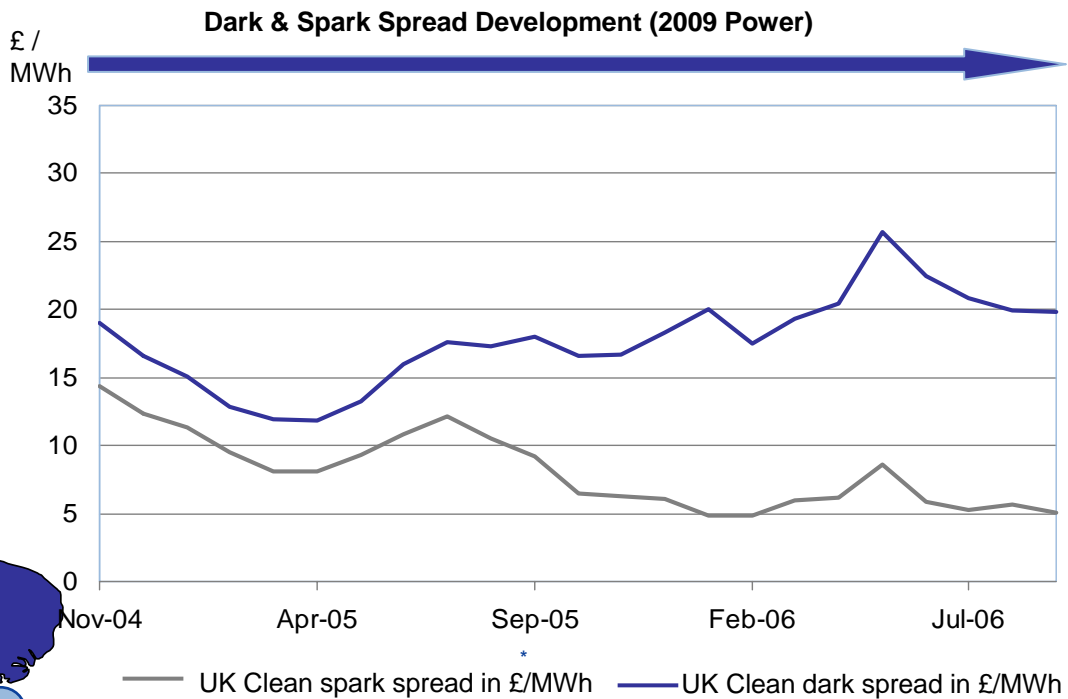
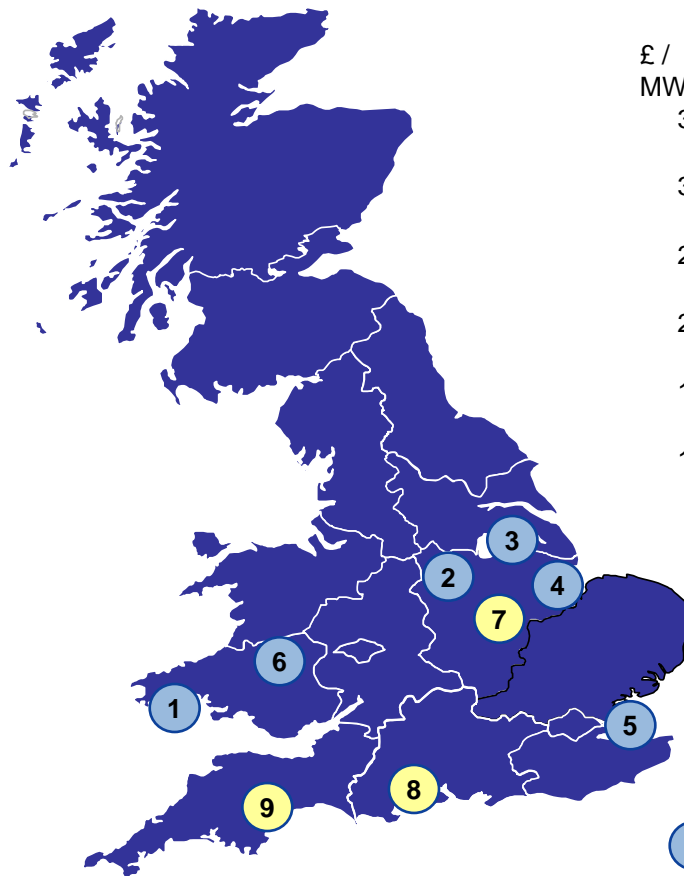
- The industry faces a period of growing demand, at the same time as a substantial amount of nuclear, coal and oil plant will retire.
- To maintain the current 20% system capacity margin, substantial new build is required, beginning very shortly



# ...in the short term, large scale new build options are limited to CCGT projects

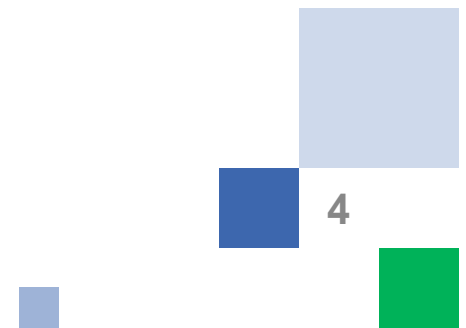
Fuel	Economics	Consented site options	Short term Scalability
 Gas	? Low forward spark spreads delaying investment	✓ Several sites consented ✓ Other sites likely	✓ Can fill capacity gap
 Coal	✓ Strong forward dark spreads ✓ Drop in CO2 price	✗ No consented sites ? Unlikely in short term	✗ Not practically available before 2012
 Wind	✓ High power price ? Additional support required for offshore	? Planning constraints limit options	? Scale limited by planning issues ✗ Intermittent wind power
 Nuclear	? Uncertainty over costs	✗ Planning enquiries likely to take many years	✗ Not practically available before 2018

# With CCGT the only real option, we expect substantial new build over the next 5 years...despite current weak spark spreads

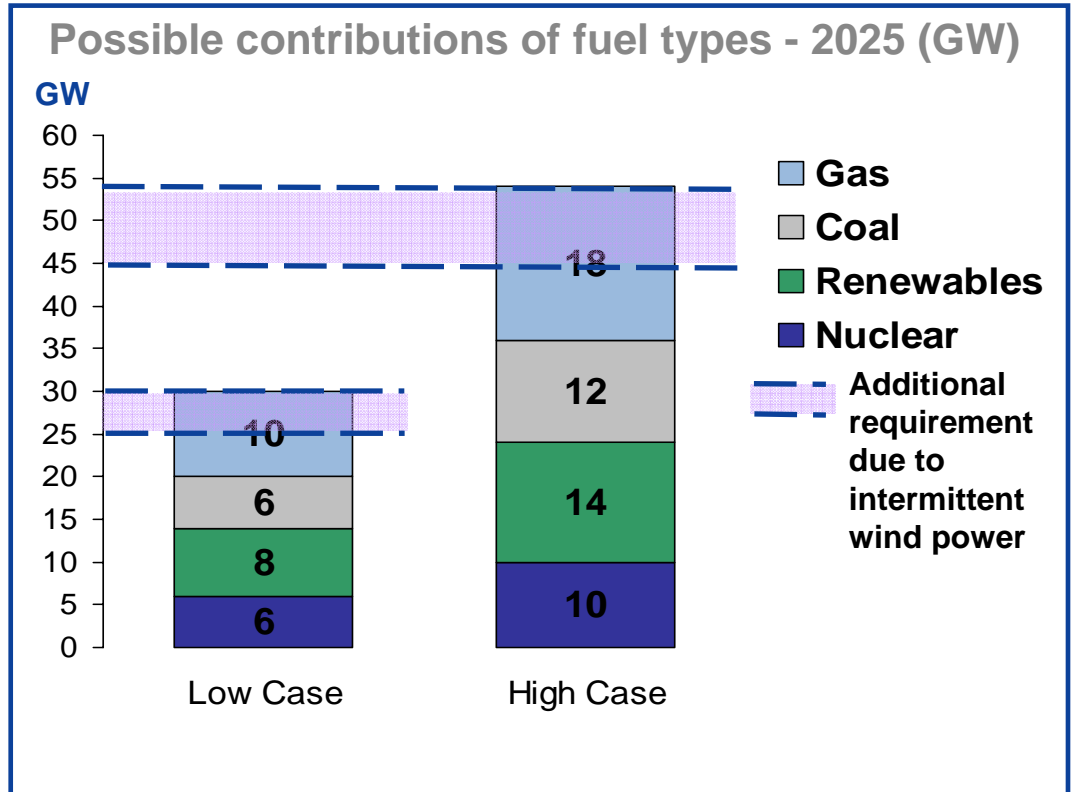
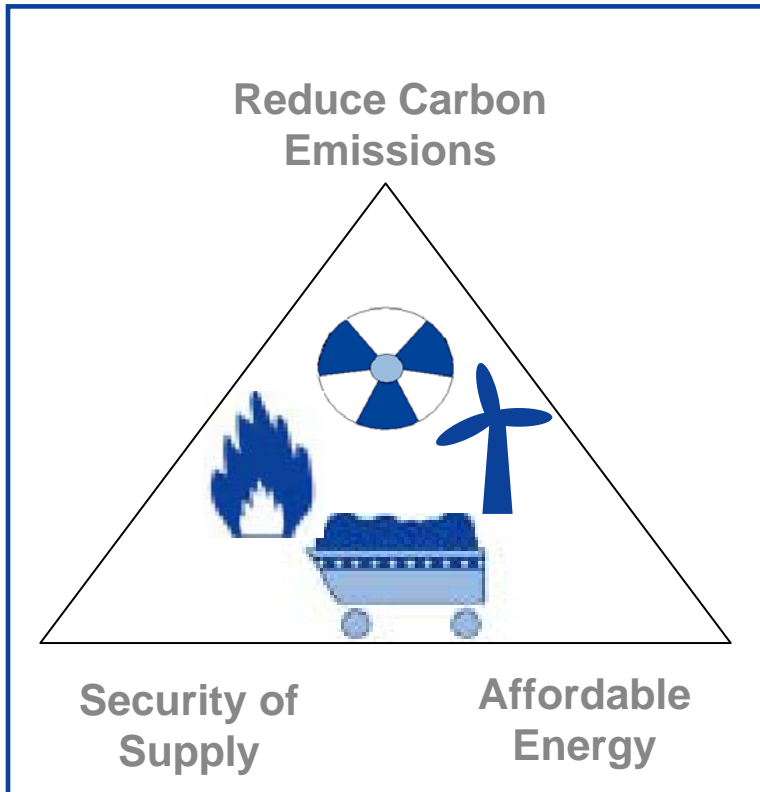


- 1 Pembroke, 2GW, RWE: PROPOSED
- 2 Drakelow, 1.2GW, E.ON: PROPOSED
- 3 West Burton, c1.3GW, eDF: PROPOSED
- 4 Sutton Bridge, c1,3GW, eDF: PROPOSED

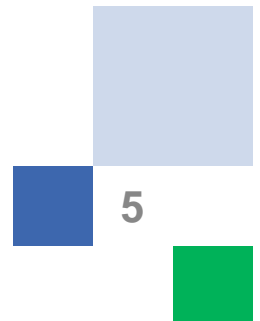
- 5 Grain, 2.4GW, E.ON: PROPOSED
- 6 Uskmouth, 0.8GW, Seven Power Ltd: PROPOSED
- 7 Staythorpe, 1.5GW, RWE: CONSENTED
- 8 Marchwood, 0.88GW, ESBI/SEE: CONSENTED
- 9 Llangage, 0.88GW, Centrica: CONSENTED



# In the long term we believe that only a diverse UK generation portfolio will meet the Governments' objectives....



- In the right environment, renewables, nuclear, and coal could make a major contribution to filling the capacity gap
- However, new CCGT will still be required to play a significant role
- Post 2025, clean coal and nuclear could further increase its market share



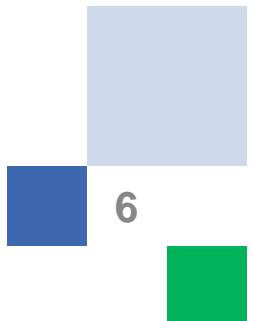
# The initial signals from the Energy Review are mostly positive..... but this is just the beginning



## Key Issue

## Impact

Carbon Pricing	<b>All low carbon investments:</b> <ul style="list-style-type: none"><li>■ Renewables, clean coal, nuclear</li></ul>
Taxation Regime	<b>All low carbon investments</b> <ul style="list-style-type: none"><li>■ Renewables, clean coal, nuclear</li></ul>
Planning & Consenting	<b>All generation investments:</b> <ul style="list-style-type: none"><li>■ Renewables, clean coal, nuclear, conventional plant</li></ul>
Research & Development	<b>New technology</b> <ul style="list-style-type: none"><li>■ Clean coal, fledgling renewable technologies</li></ul>
Demand Side Management	<b>All generation investments:</b> <ul style="list-style-type: none"><li>■ Renewables, clean coal, nuclear conventional plant</li></ul>

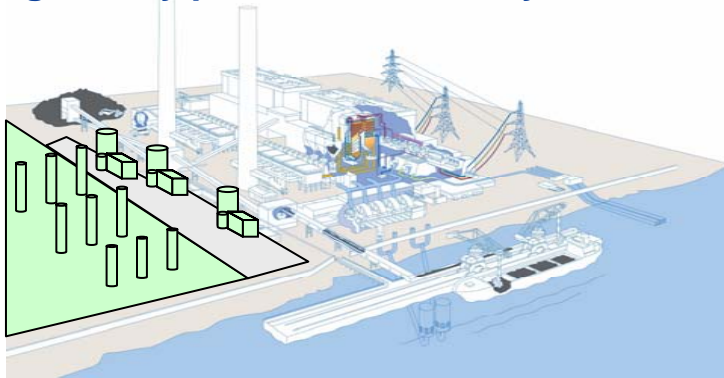


# In the right environment, the industry is 'ready to depart'...so 'mind the gap'....



## Clean Coal

e.g Tilbury power station study



## CCGT

9+ named projects



## Nuclear

Several companies Investigating nuclear options



## Renewables

Significant opportunities available

