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Winter Outlook 2012/13

British Institute of Energy Economics

11th October 2012

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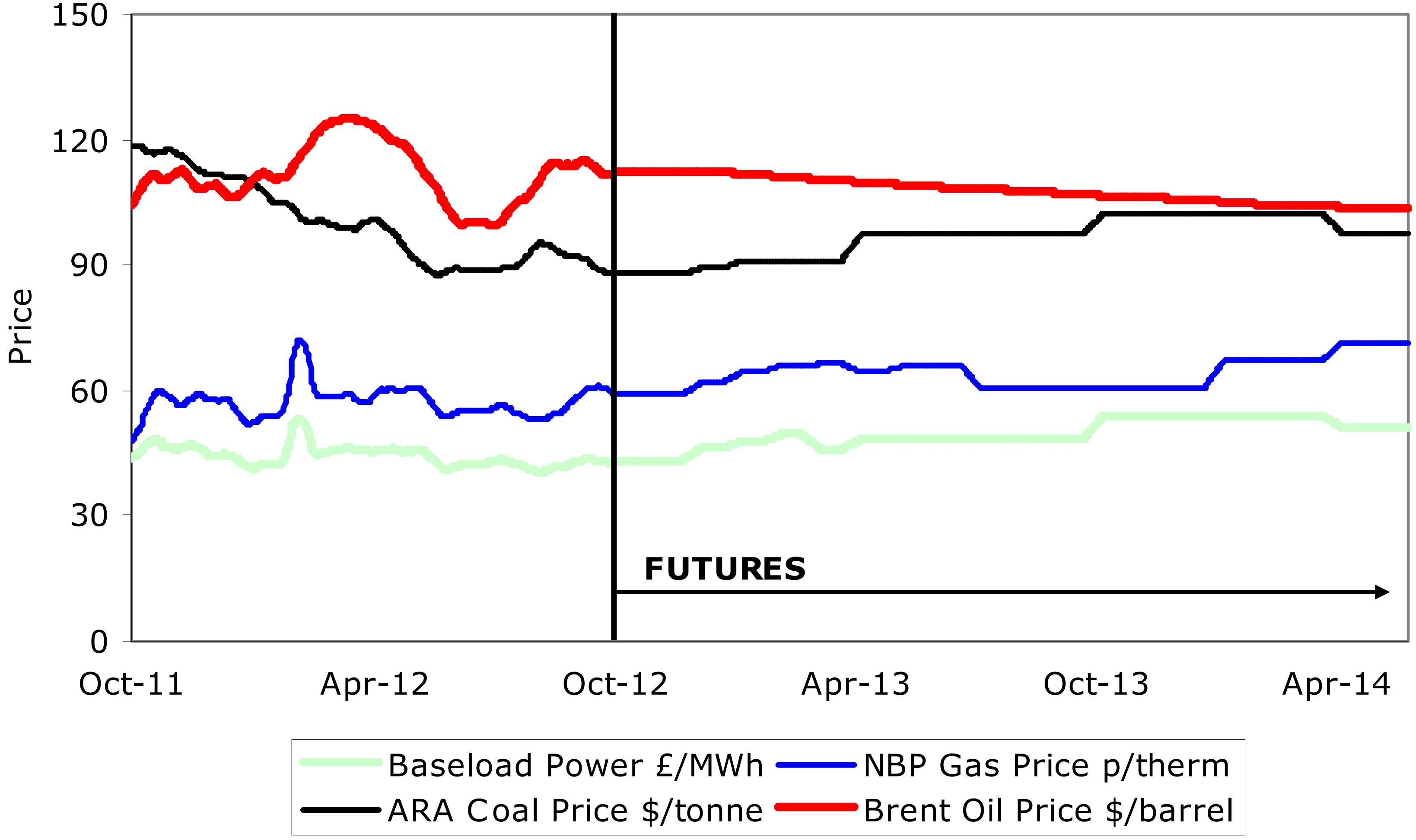
Fuel Prices



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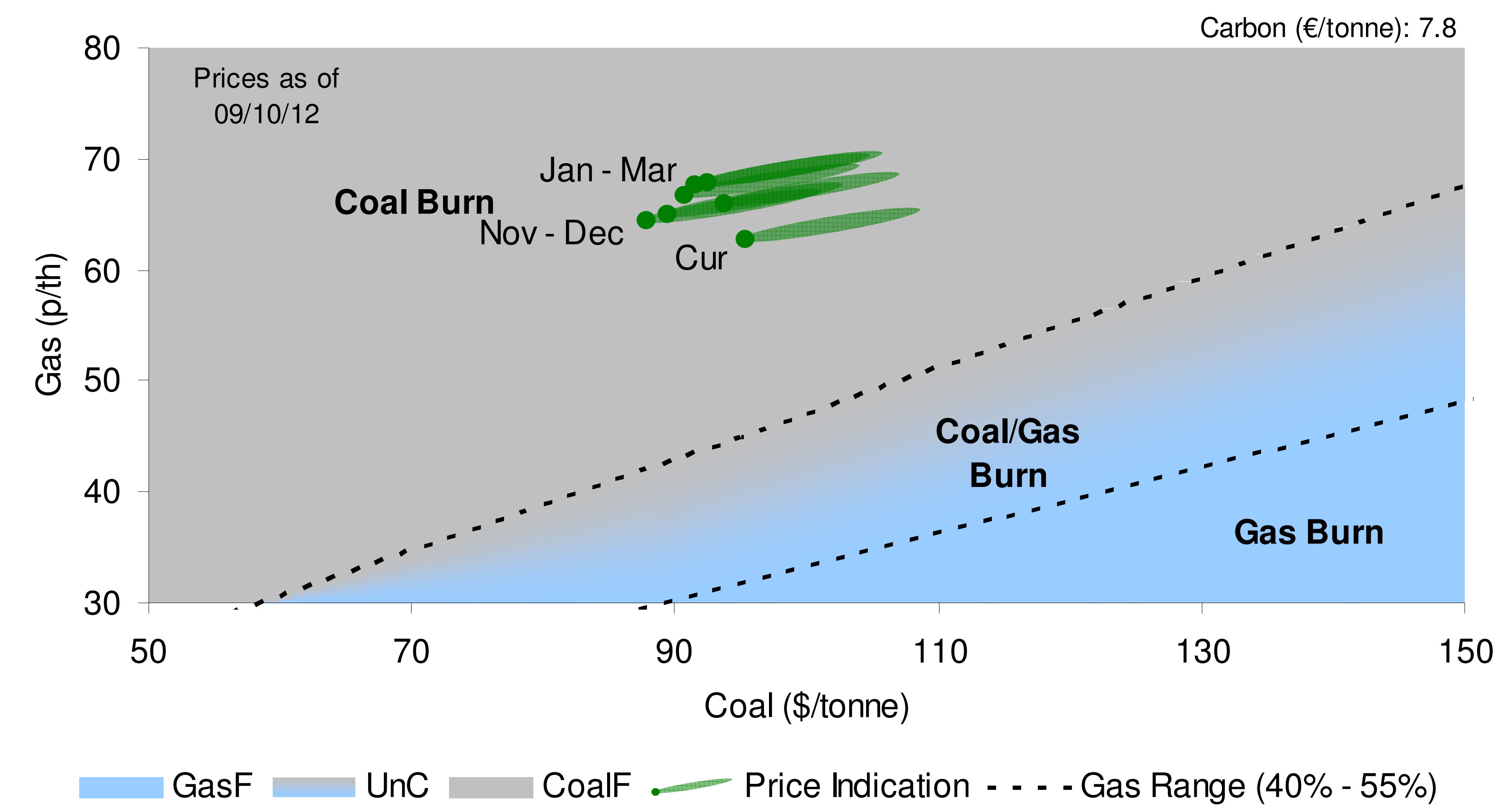
Gas – Relative Power Generation Economics



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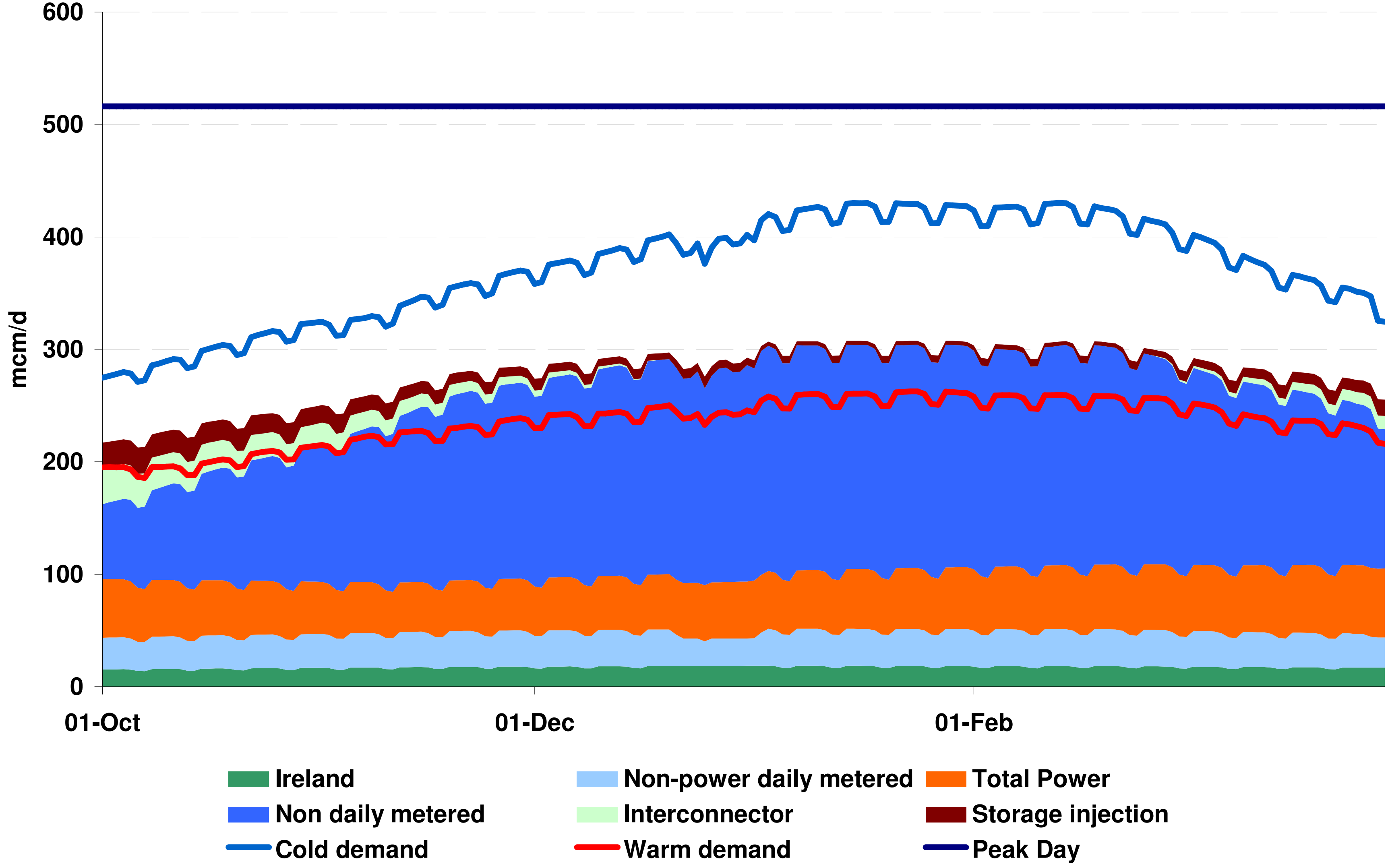
Gas – 2012 / 13 Demand



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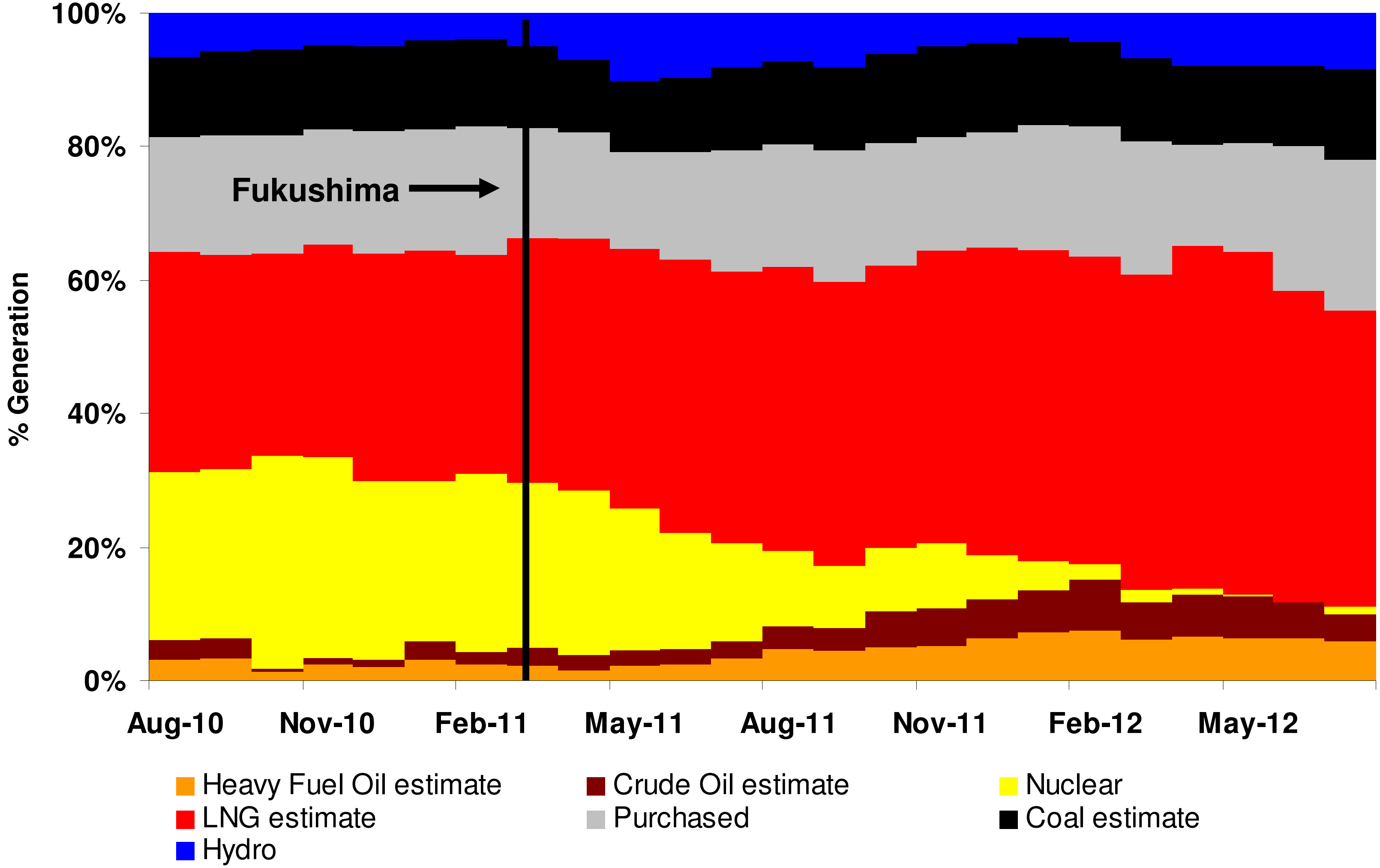
Gas – 2012 / 13 Supplies

	2011/12	2012/13		
(mcm/d)	400+	Range	Dec – Feb	400+
UKCS	125	96 – 130	113	124
Norway	105	70 – 115	95	105
BBL	32	24 – 36	28	30
IUK	20	0 – 30	8	20
LNG Imports	92	30 – 100	45	80
Total	**374**	**220 – 411**	**289**	**359**
Storage	65	0 – 108	31	80
Total inc. Storage	**439**	**220 - 519**	**320**	**437**

Japanese power generation mix



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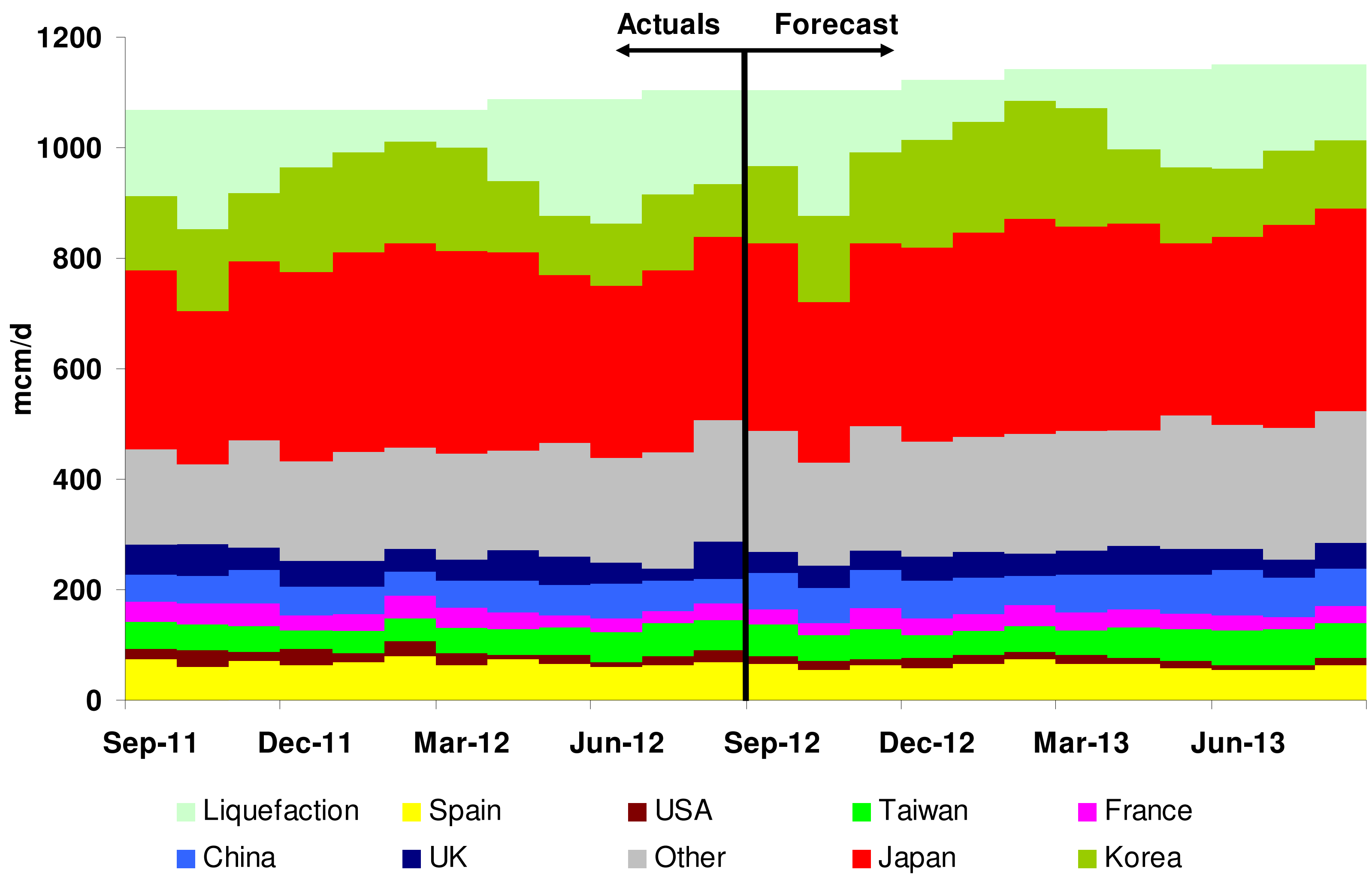
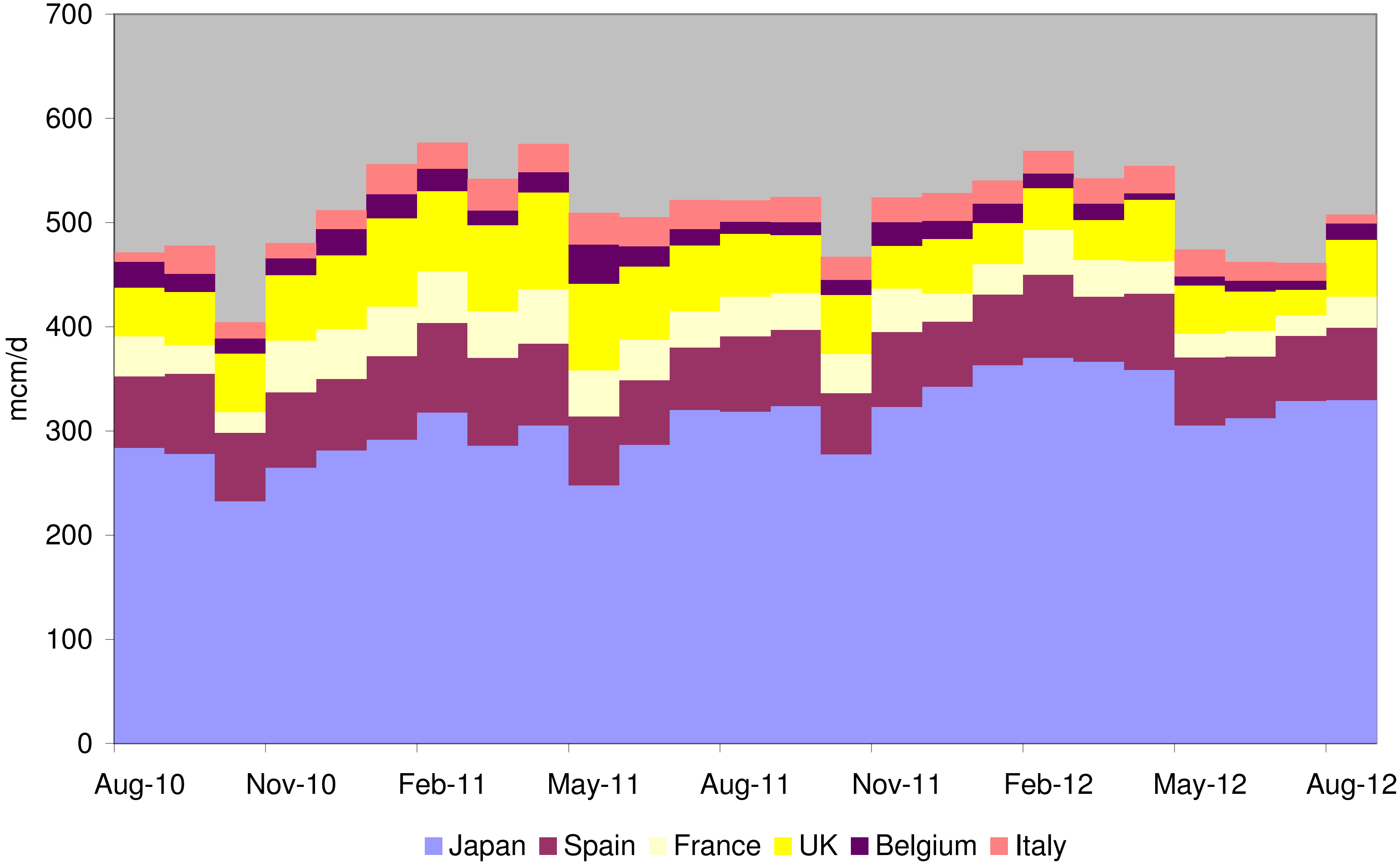
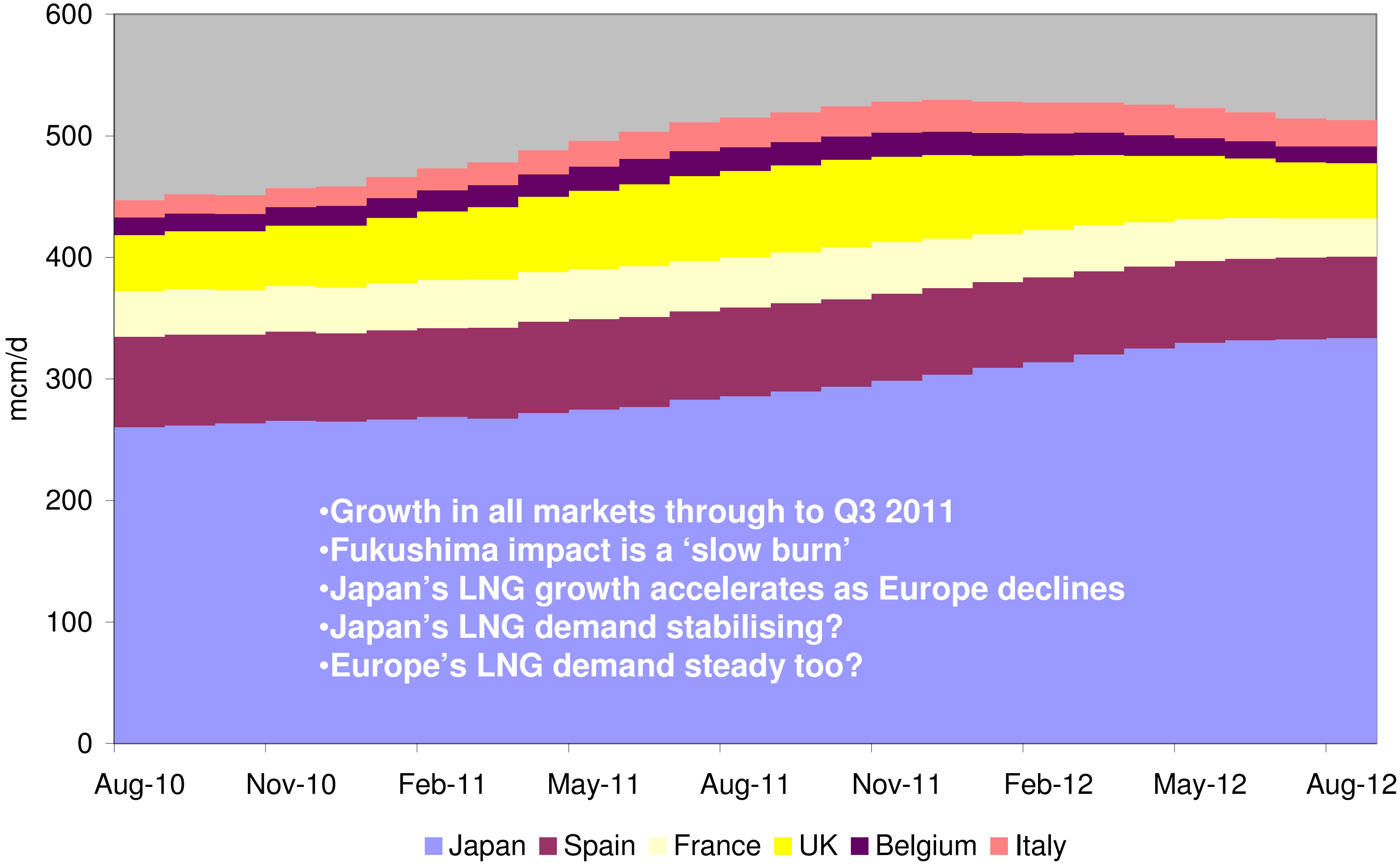
Global LNG supply / demand



Monthly LNG Imports



12 month average LNG imports



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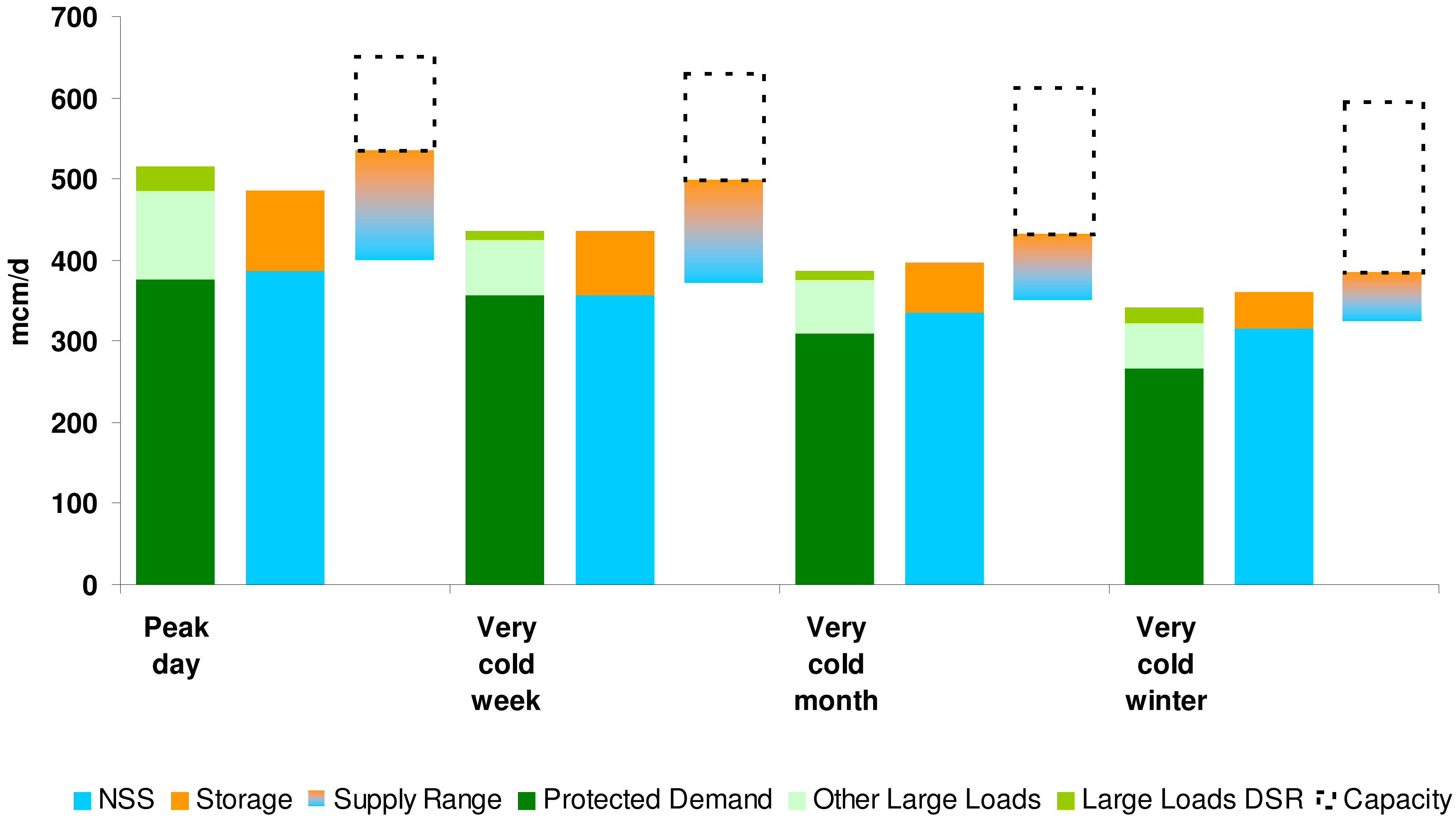
Gas - Cold Spell Analysis for Severe Conditions



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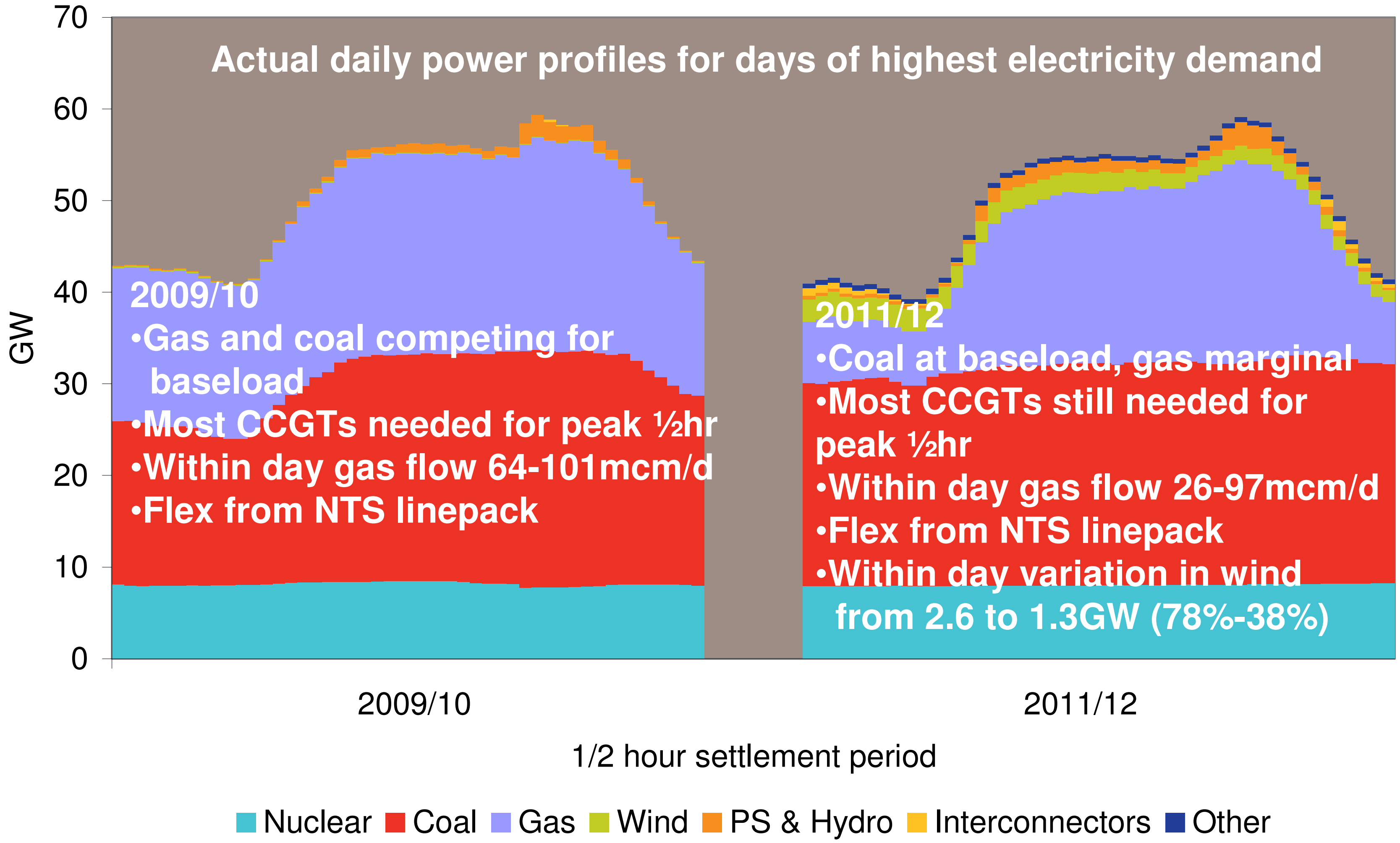
Gas / electricity interaction (current)



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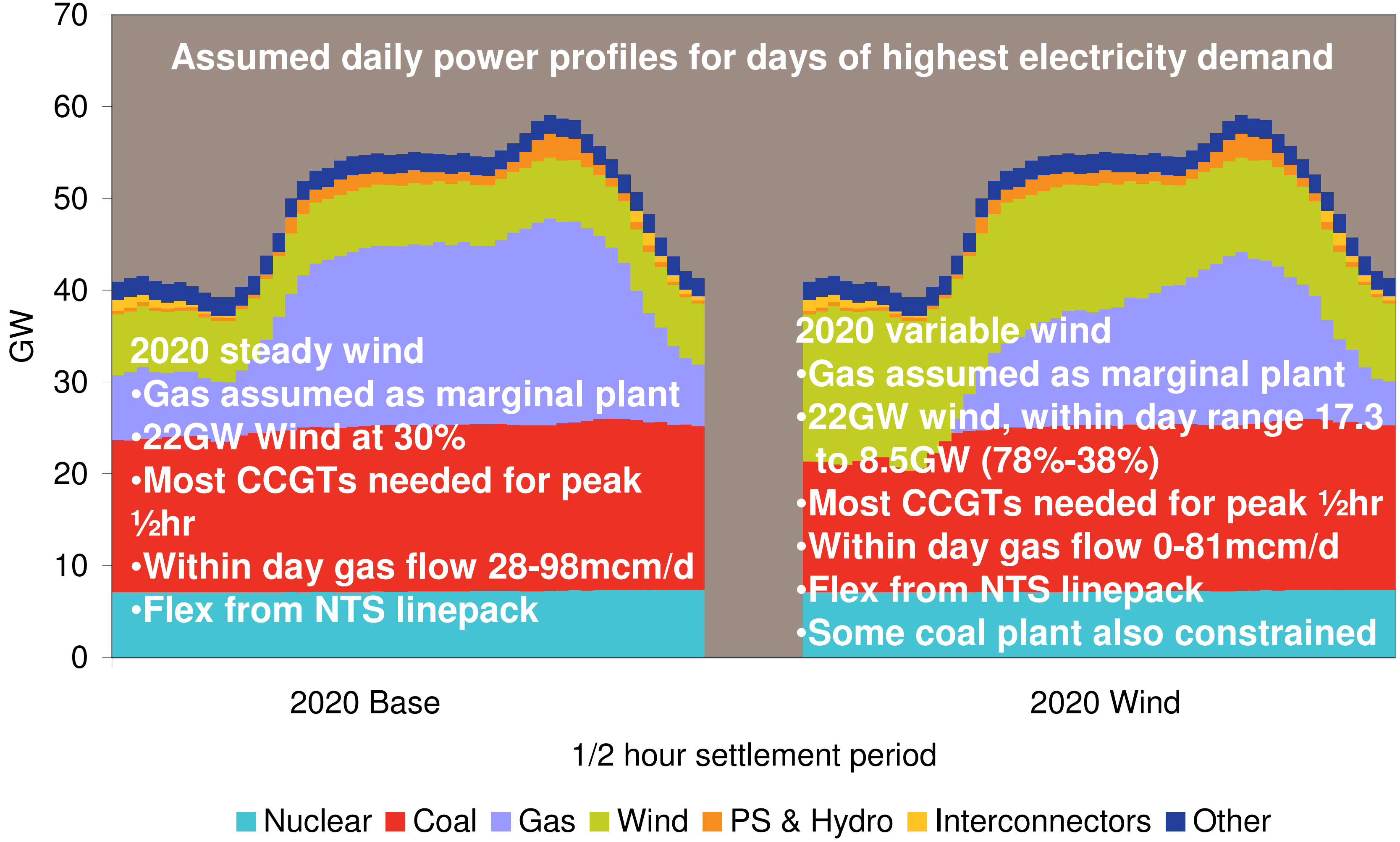
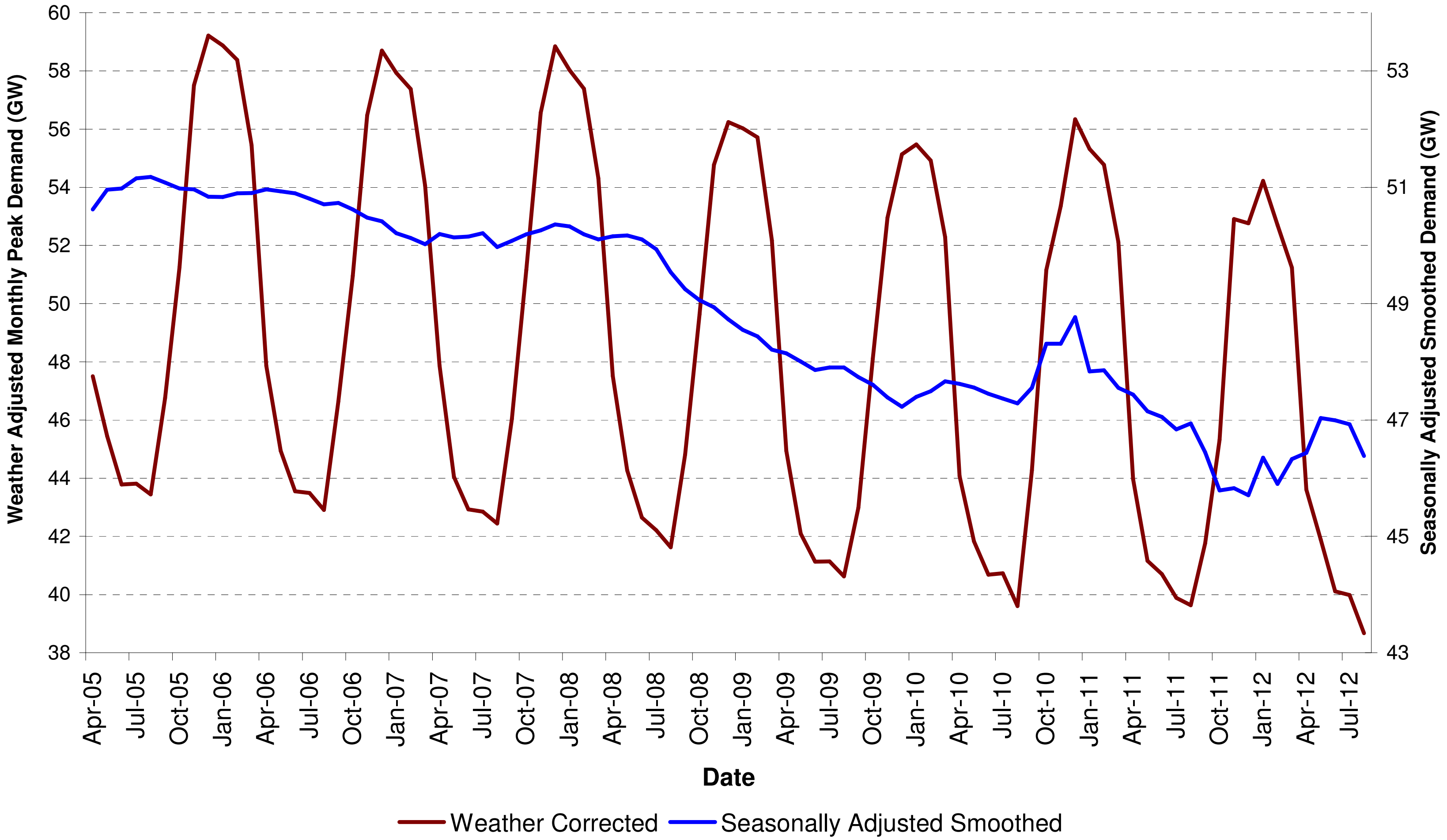
Gas / electricity interaction (2020)



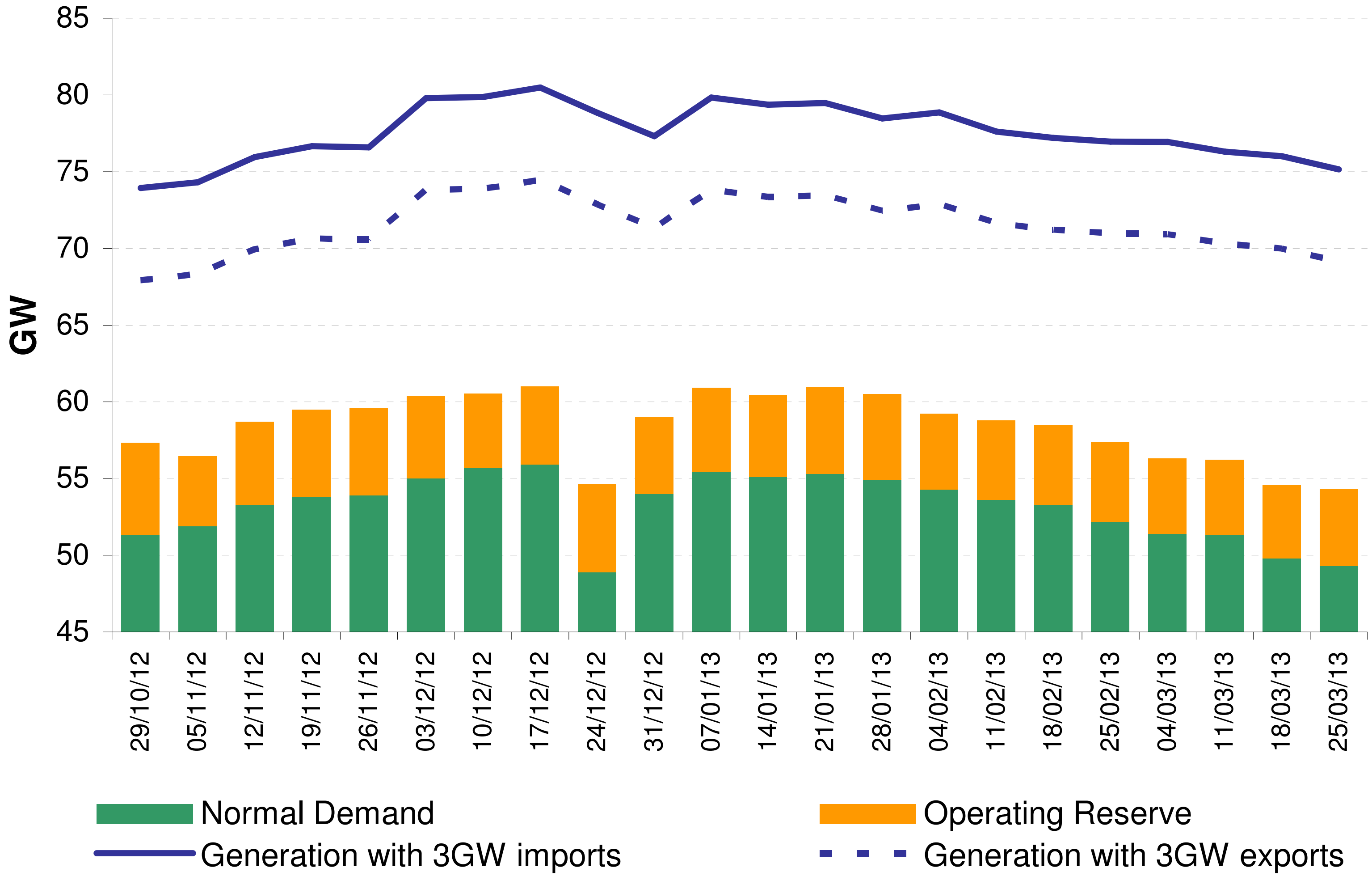
Electricity - Demand



Electricity – Generation Capacity Operational View

Power Station Type	Capacity (GW)	
Nuclear	**9.5**	↓
Interconnectors	**3.0**	–
Hydro	**1.0**	–
Wind	**4.7**	↑
Coal	**26.1**	↓
Biomass	**0.8**	↑
Oil	**2.1**	–
Pumped storage	**2.7**	–
OCGT	**1.2**	↓
CCGT	**28.0**	↓
Total	79.1	

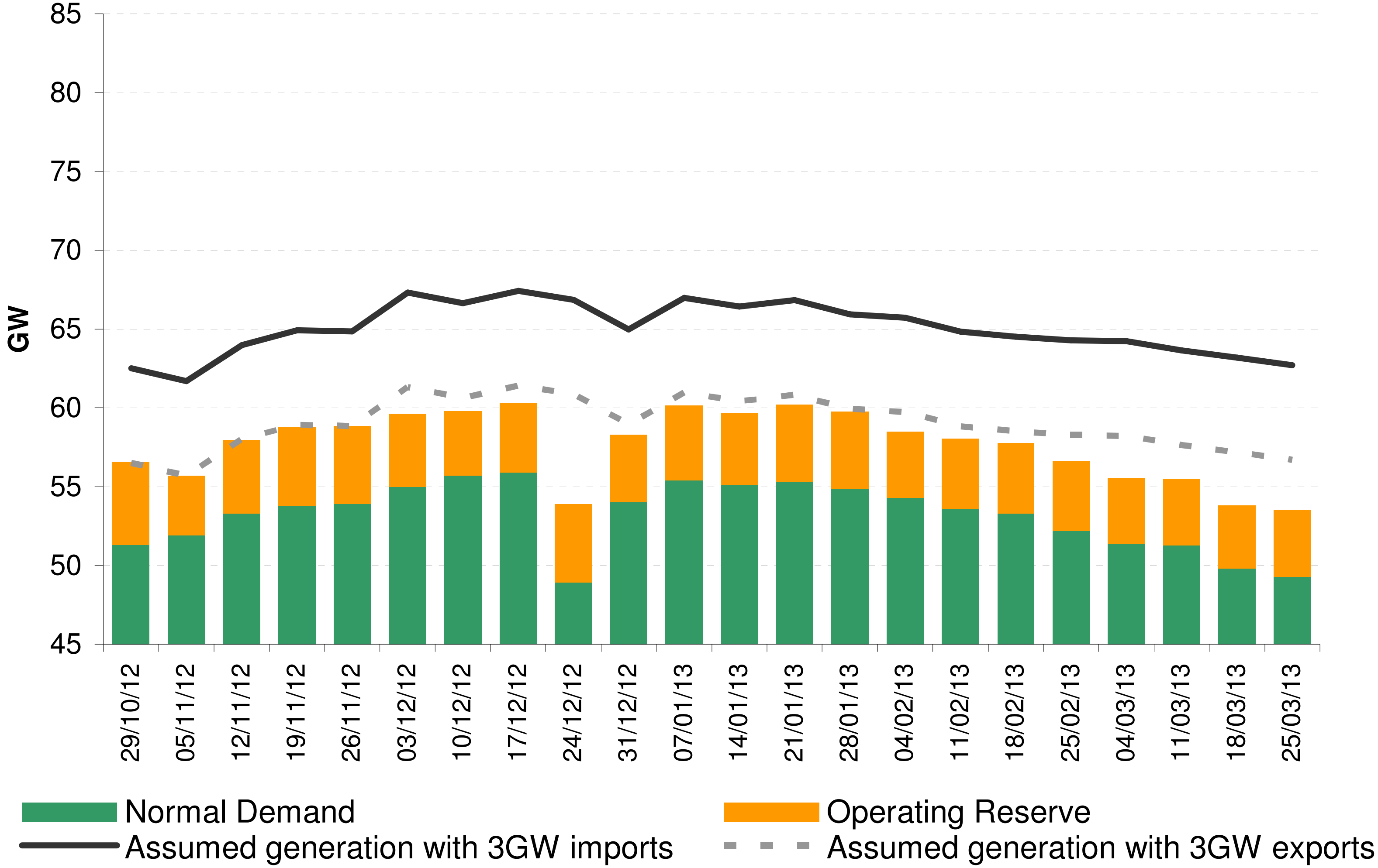
Electricity – Normal Demand and Notified Generation Availability



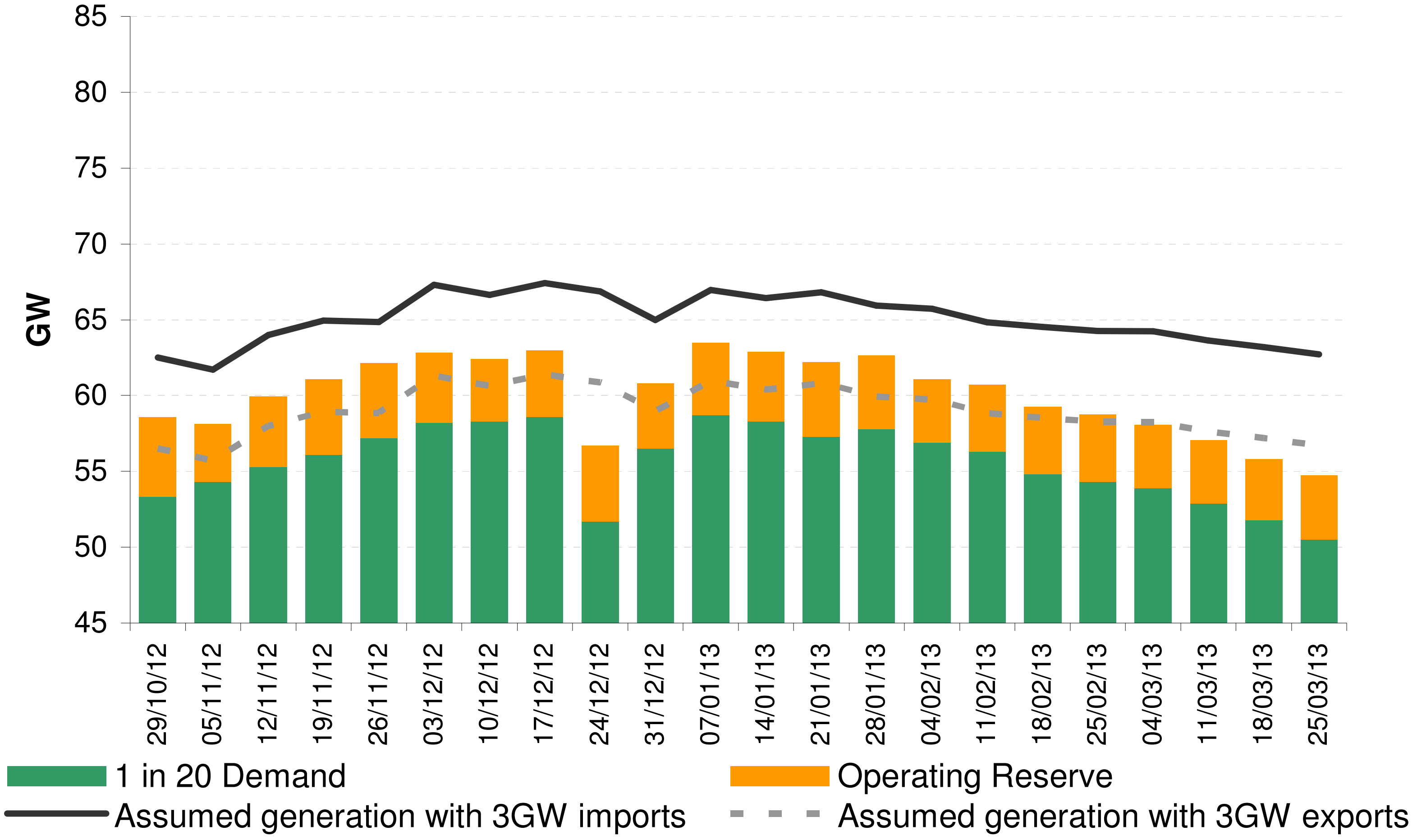
Electricity – Assumed Availability

Power Station Type	Assumed Availability
Nuclear	**84%**
Interconnectors	**100%**
Hydro	**75%**
Wind	**10%**
Coal	**85%**
Biomass	**85%**
Oil	**85%**
Pumped storage	**98%**
OCGT	**94%**
CCGT	**87%**
Total	83%

Electricity – Normal Demand and Assumed Generation Availability



Electricity – 1 in 20 Demand and Assumed Generation Availability



Winter Outlook 2012/13 - Summary

- Gas
  - Forward winter fuel prices strongly favour coal burn over gas
  - Weather corrected gas demand forecast to be lower than last winter
  - Forecast non storage supplies are slightly lower than last winter
  - LNG uncertainty given increased global demand and Japanese power mix
  - 2012/13 storage deliverability – higher than previous winter, should increase further within winter when new facilities are commissioned
- Electricity
  - Average cold spell demand forecast 0.9 GW higher than last winter
  - Notified and Assumed Generation availability has increased by approximately 1 GW from last winter
  - Demand and full interconnector exports are expected to be met in 1 in 20 conditions