#### Winter Outlook 2012 / 13





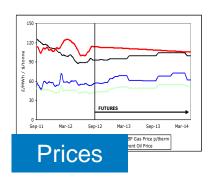


Ofgem Winter Outlook Seminar 5<sup>th</sup> October 2012 Chris Train – Market Operation Director

#### Winter Outlook 2012 / 13 Timeline

- Winter Outlook Consultation Published 10<sup>th</sup> July
- Consultation Responses Received 17<sup>th</sup> August
  - Two responses received
- Ofgem Winter Outlook Seminar 5<sup>th</sup> October
- Winter Outlook Report Publish w/c 8<sup>th</sup> October

#### Winter Outlook 2012 / 13

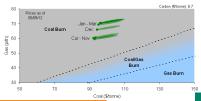


Gas vs Coal for Power







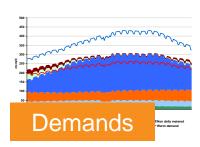


Generation

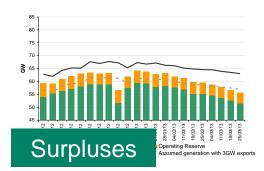


Demands

Signature Smoothed

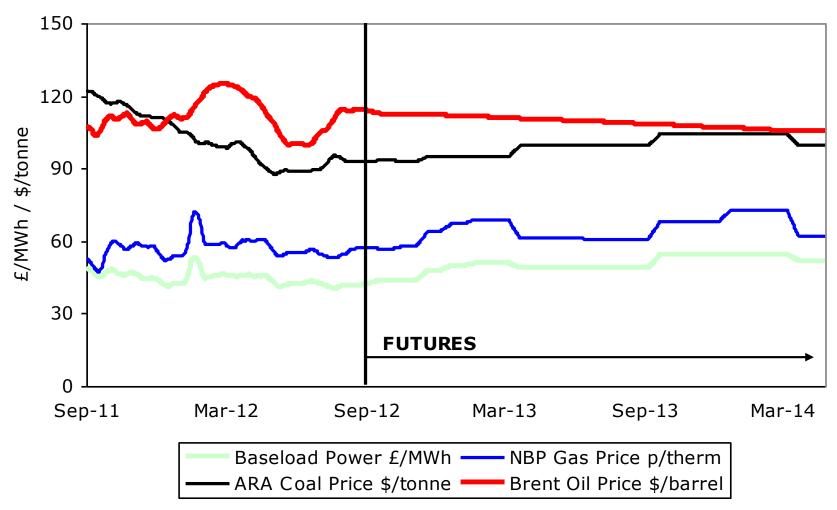




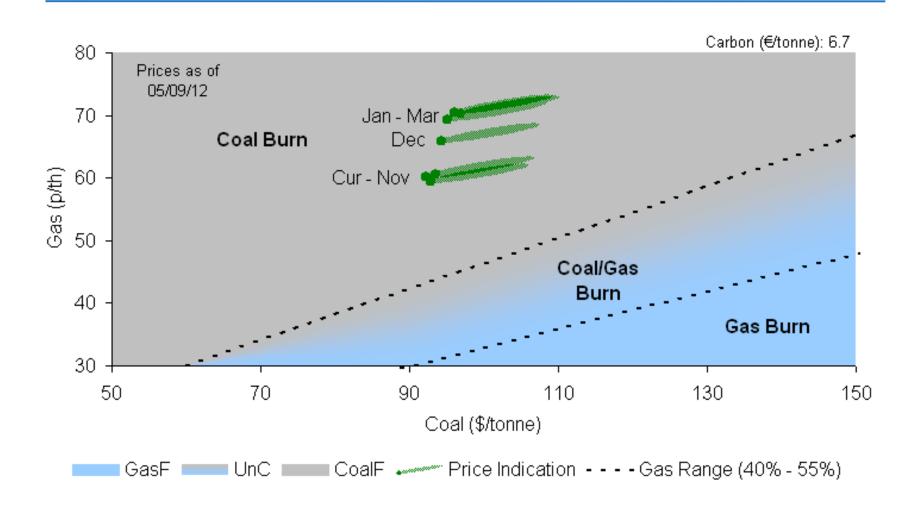




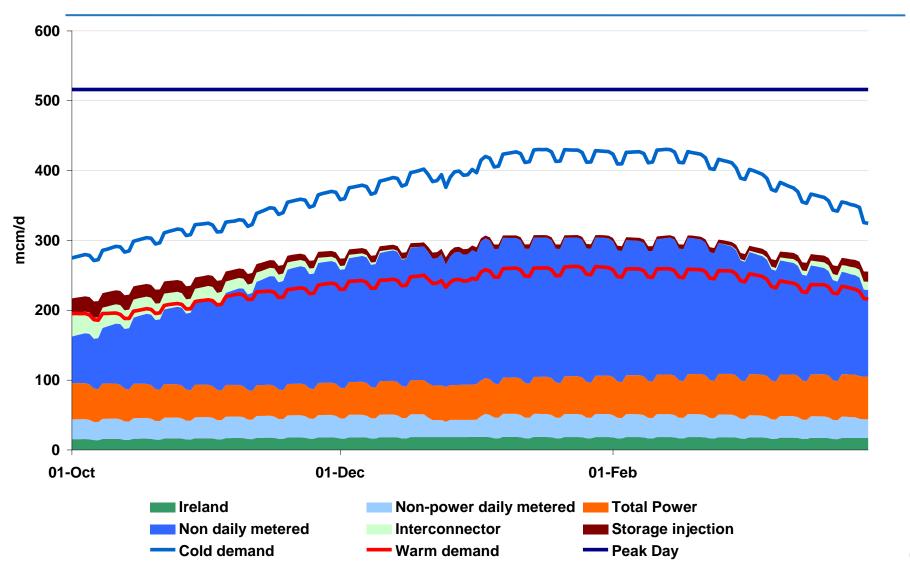
#### **Fuel Prices**



#### **Gas – Relative Power Generation Economics**



#### Gas - 2012 / 13 Demand

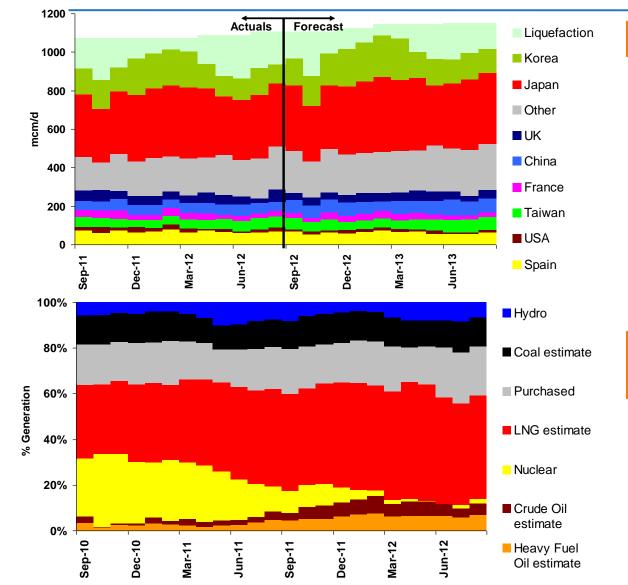




# **Gas – 2012 / 13 Supplies**

	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

### Global LNG Supply/Demand Projection



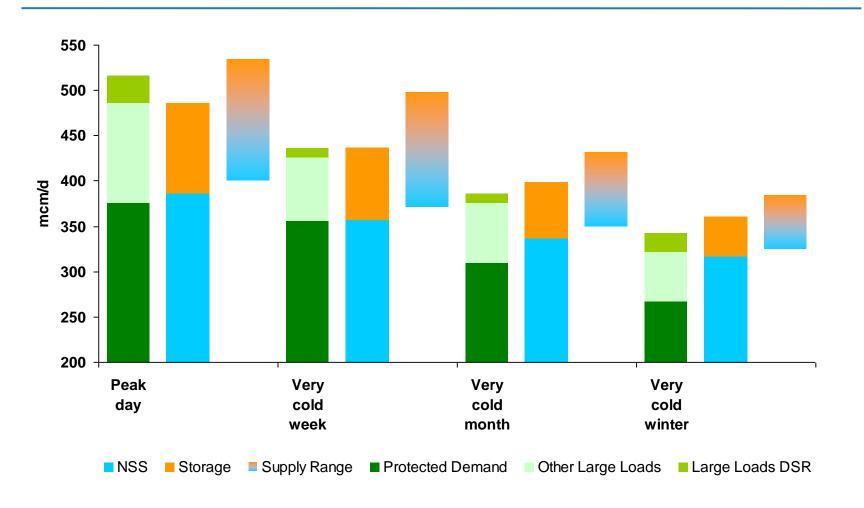
#### **Global LNG**

- A year-on-year increase in global LNG demand of ~5%
- Increase in LNG liquefaction capacity since last winter
- LNG market (on a global basis) continue to remain tight over winter 2012/13

# Japanese Power Generation Mix

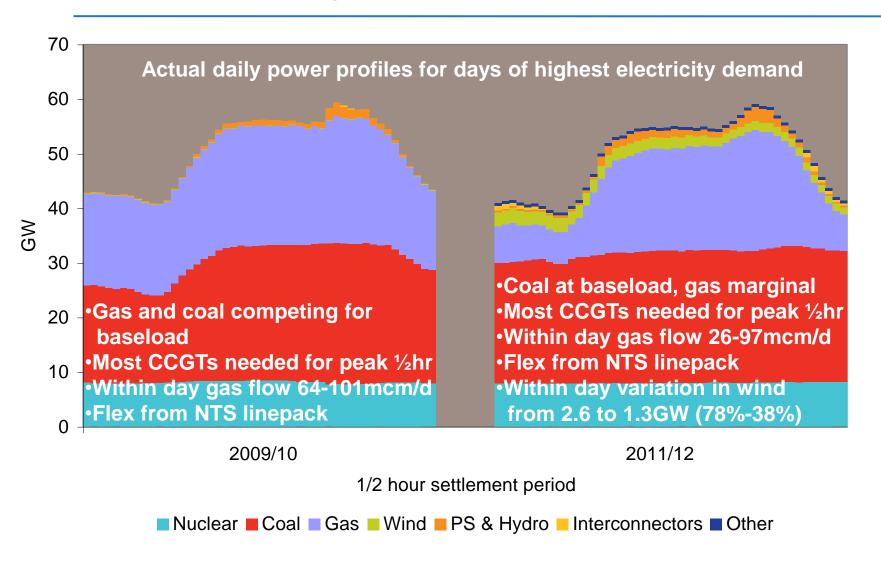
 Restart of nuclear plants remains uncertain, with some unofficial reports suggesting no restarts until summer 2013

#### **Gas - Cold Spell Analysis for Severe Conditions**

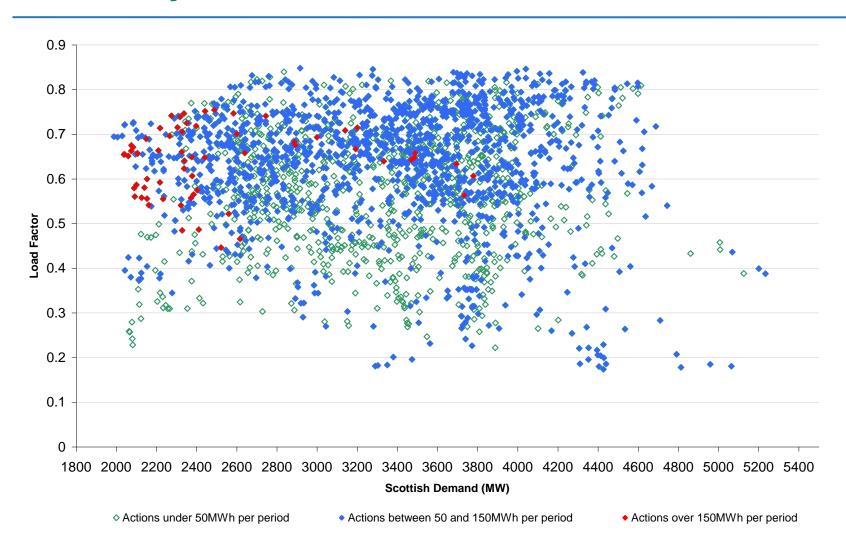




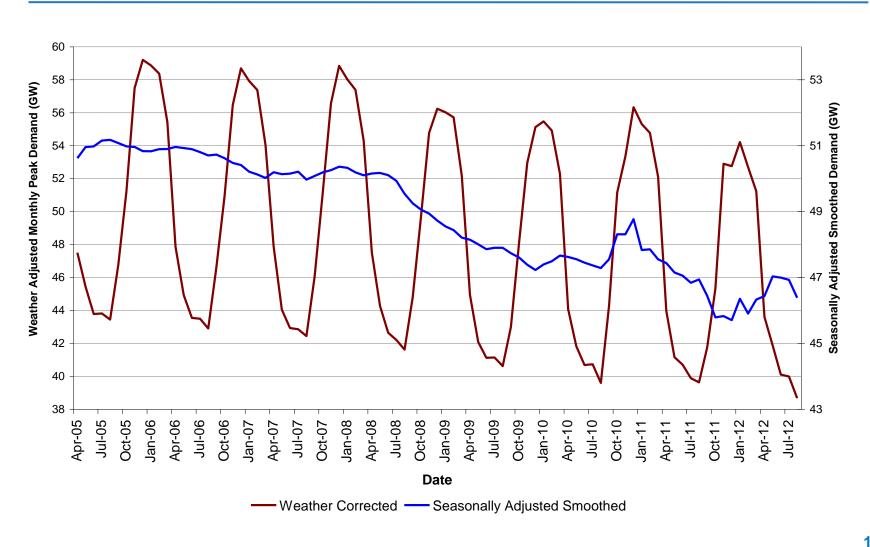
#### **Gas / Electricity Interaction**



### **Electricity – Wind Curtailment in Scotland**



# **Electricity - Demand**

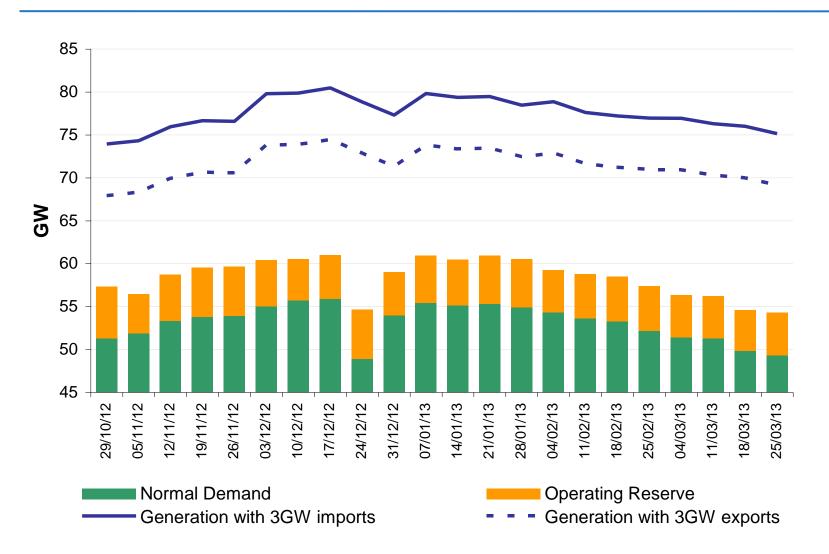




# **Electricity – Generation Capacity Operational View**

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**

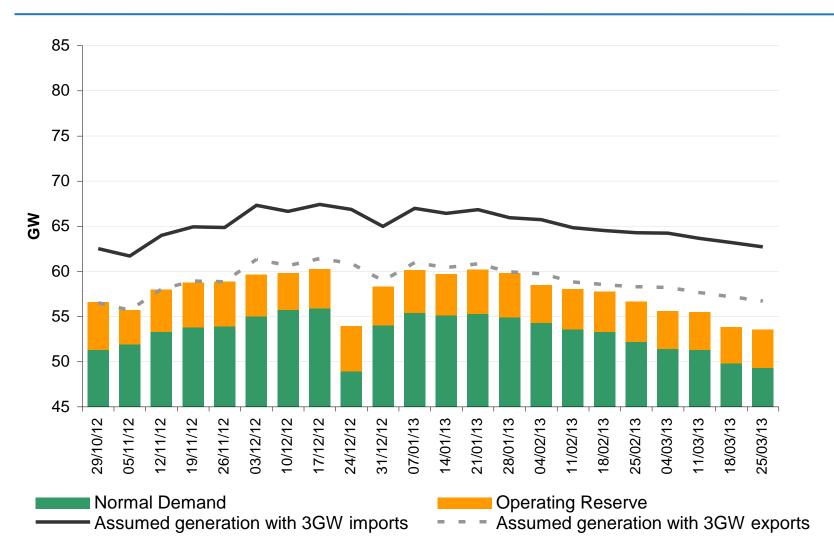




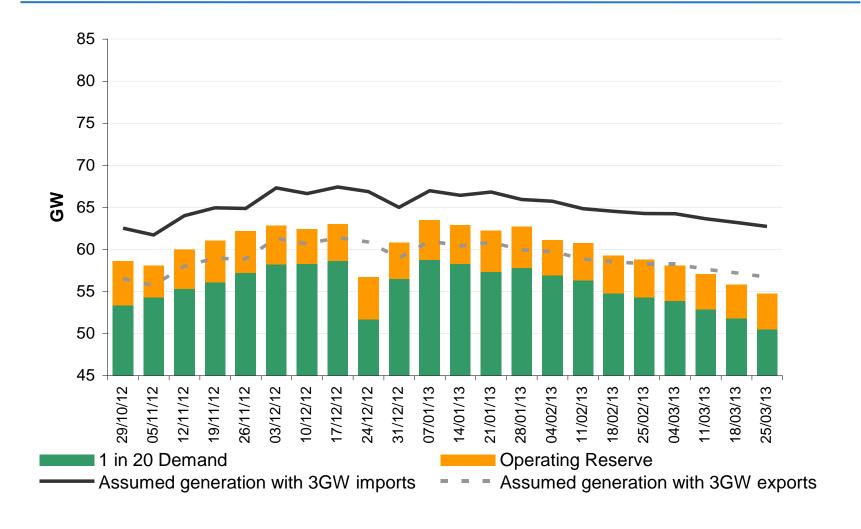
# **Electricity – Assumed Availability**

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
- 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