

## Winter Outlook 2014 / 15



Ofgem Winter Outlook Seminar  
28<sup>th</sup> October 2014  
Cordi O'Hara – Market Operation Director

## Energy is headline news...

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EDF Energy shuts three UK nuclear reactors after fault found



Ukraine crisis: Russia halts gas supplies to Kiev



Didcot B power station fire: Half of site out of action



Fire hits Ferrybridge power station

Fifteen fire crews attend blaze at power station in West Yorkshire operated by energy giant SSE



National Grid to contract for new balancing services

## **Our stakeholders' views underpin the Winter Outlook Report**



**Enhanced and broadened stakeholder participation**

**Stakeholder feedback has driven the improvements in analysis and content of report**

**Enhanced security of supply analysis**

**Easier to understand with more summaries and simpler explanation**

**We will continue to develop the Winter Outlook Report based on stakeholder feedback...we want to hear from you!**

## Gas Outlook



## Secure gas supplies under normal conditions...

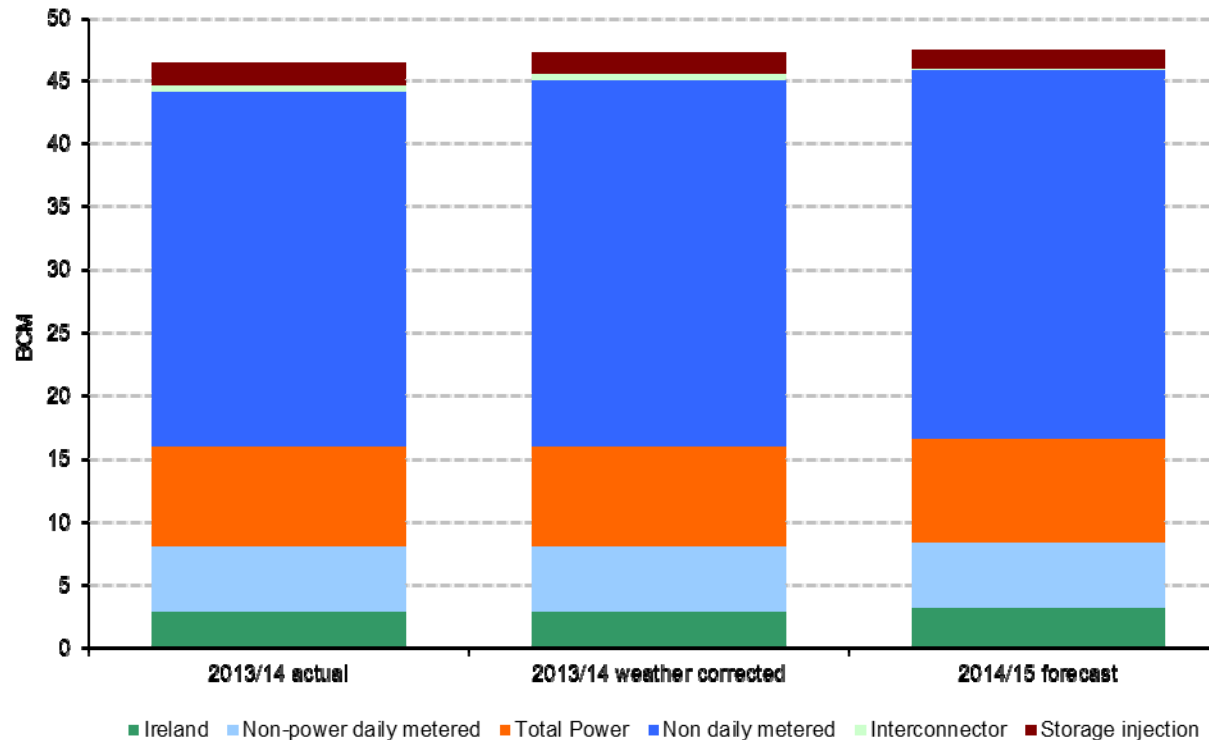
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**Gas market is well supplied and able to cover any cold spells.**

**Gas supplies, storage and network capacity well in excess of maximum expected demand.**

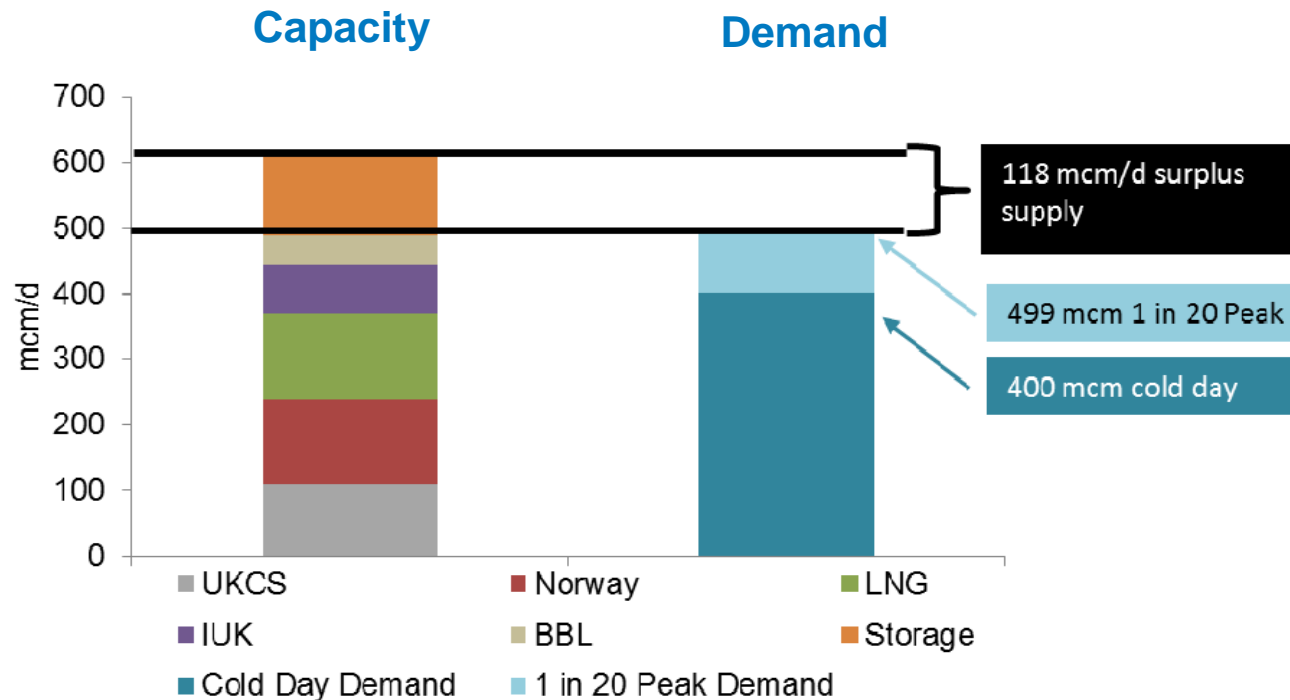
**Supply interruptions from Russia pose a low risk to UK energy security.**

## Winter gas demand expected to be similar to last year



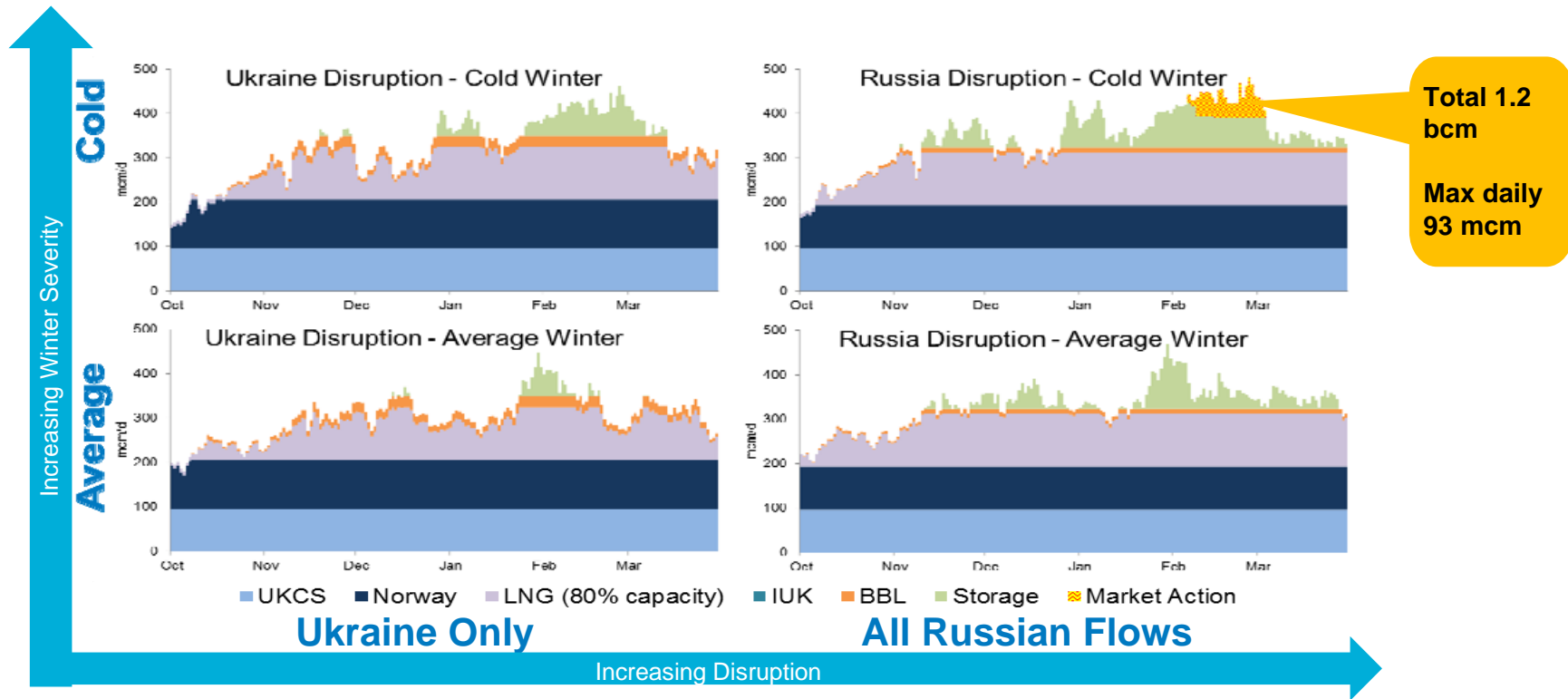
- Non Daily Metered (NDM), Daily Metered (DM) and Industrial to remain flat.
- Small increase due to expected rise in demand from power generation.

## There is sufficient capacity and diversity of supply to meet 1 in 20 peak conditions



- Highest potential demand is 499 mcm/d at 1 in 20 conditions.
- Potential supply, including storage, of 617 mcm/d.
- This allows significant flexibility for gas to come from either the continent or LNG.

## Russia/Ukraine tensions pose a low risk to UK gas supply



- Stress tests show that most scenarios can be accommodated as business as usual
- Only cold winter and full Russian supply disruption would require further market actions



## **Gas Summary**

**2014/15 demand slightly up on 2013/14**

**Diverse range of supply capacity, in excess of peak demand, subject to market forces.**

**Risk posed by any curtailment of Russian gas understood, the capacity is in place to receive alternative gas flows and the market is prepared.**



## Electricity outlook



**Electricity margins are expected to be tighter than last year, but we have the tools and services in place to balance the system**

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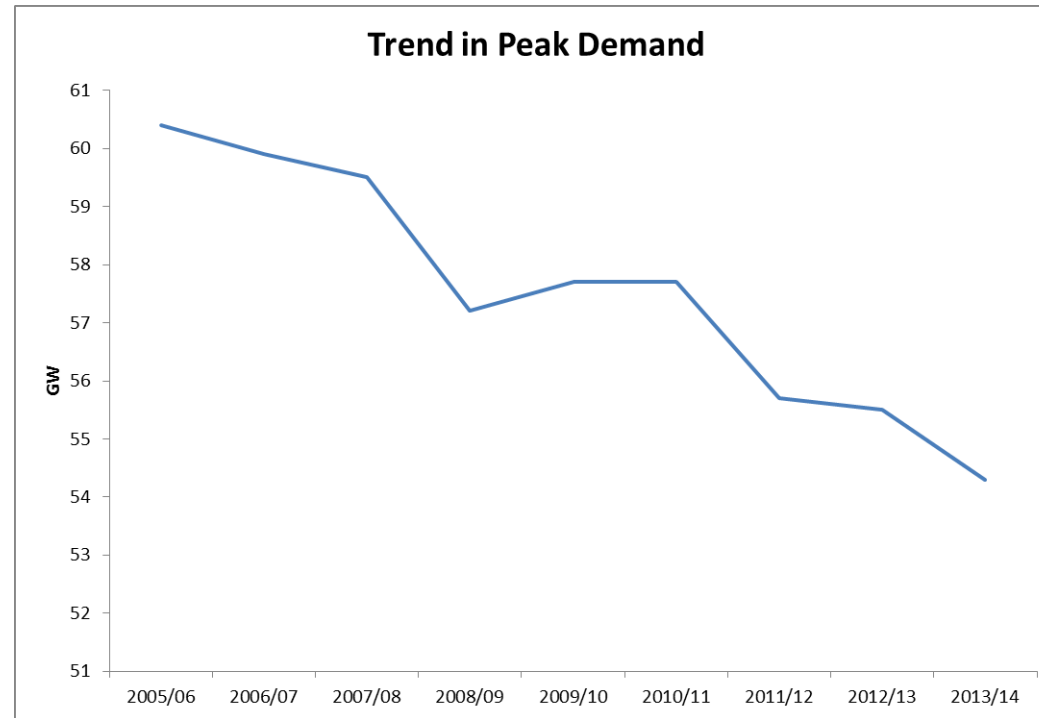


**Recent generator capacity reductions make this year more challenging than last.**

**New balancing services will enable National Grid to manage tighter margins.**

**There is no room for complacency, but we have the right tools in place.**

## General trend in peak demand is downwards

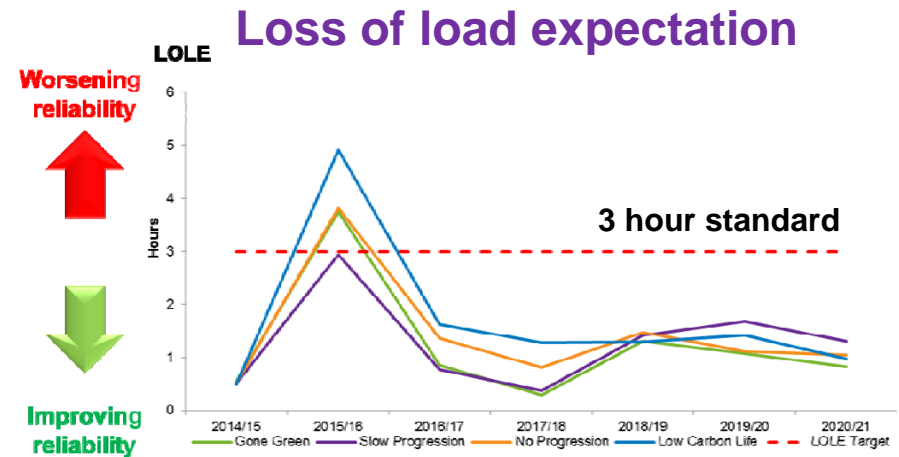
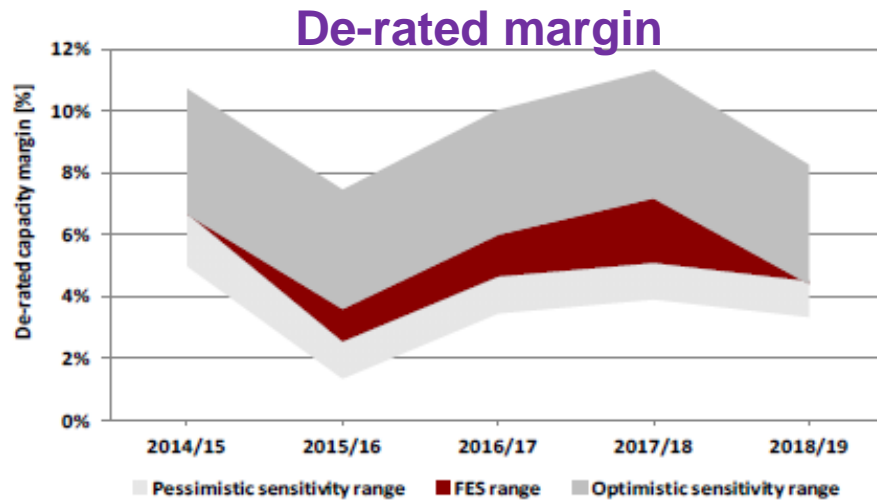


Demand Forecast (GW)	2013/14	2014/15
Average Cold Spell (ACS - Restricted)	56.3	55.0

**The Secretary of State has set a new Reliability Standard and method**

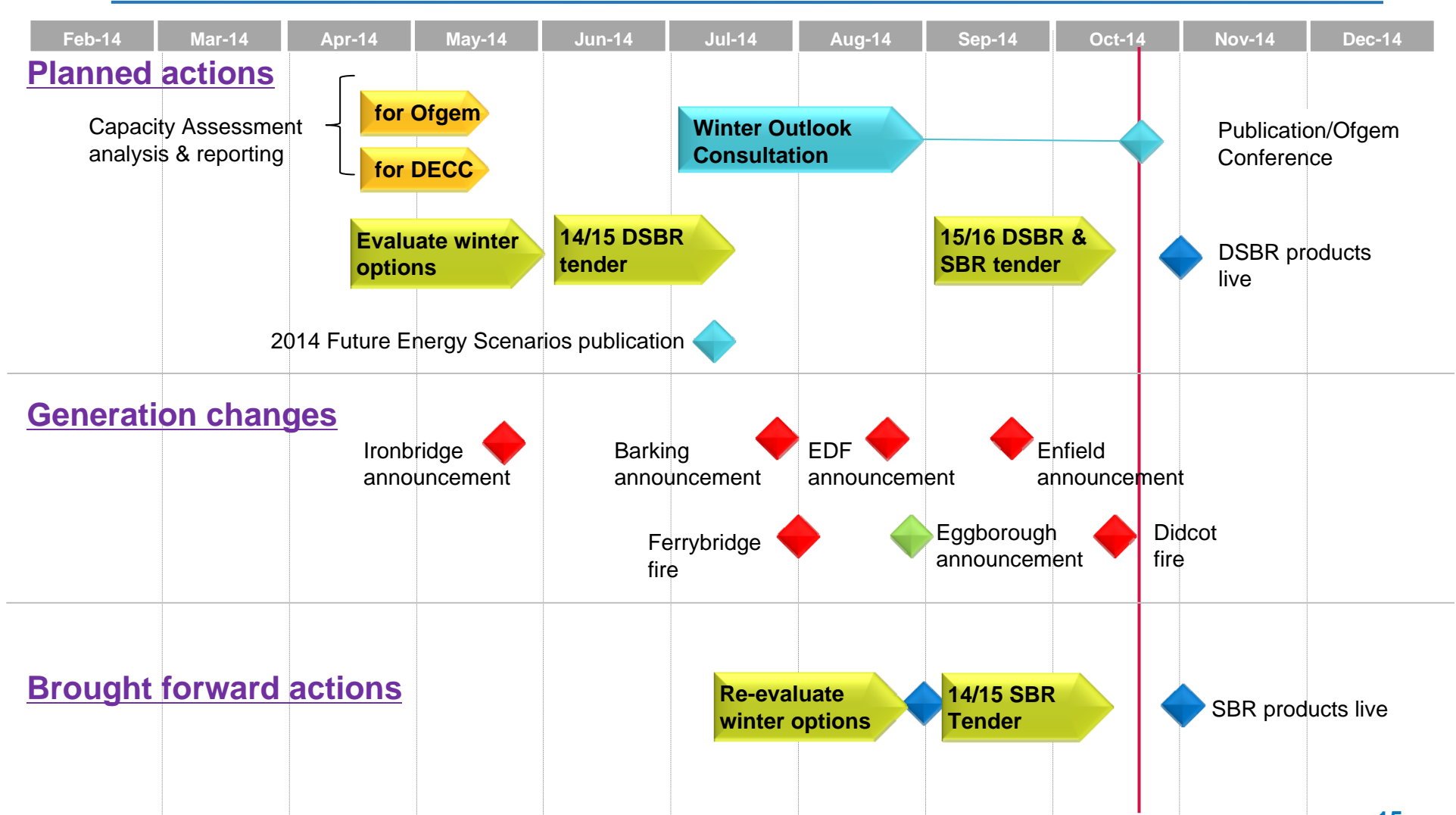
<p><b>Loss of Load Expectation (LOLE)</b></p>	<p><b>De-rated Margins (%)</b></p>
<ul style="list-style-type: none"> <li>• <b>Stochastic model for whole winter view, and multi year view.</b></li> <li>• <b>3 Hour Reliability Standard set by Secretary of State.</b></li> <li>• <b>It means on average how often we would have to use our reserves.</b></li> <li>• <b>Informs Capacity Assessment, EMR Capacity Mechanism and New</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Operational measure for weekly assessment used within winter.</b></li> <li>• <b>More granular, near time.</b></li> <li>• <b>De-rates generation capacity to take into account breakdowns.</b></li> <li>• <b>Outages considered separately, based on supplied data.</b></li> </ul>

# The June Electricity Capacity Assessment Report **nationalgrid** showed a range of potential margins, and loss of load within standard for this winter...



Ofgem Scenario	2014/15 De-Rated Margin (%)
Optimistic	8 - 11
FES Range	6.5 - 6.7
Pessimistic	4.2 – 5.4
LOLE	0.5 hours

# Since then the generation picture has evolved and we have responded by accelerating the deployment of Supplemental Balancing Reserve



**New balancing services are now in place...**

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### **Demand-Side Balancing Reserve**

- Tender in July
- 431 sites participating

### **Supplemental Balancing Reserve**

- Tender in Sept
- 3 power stations offered contracts

**1100MW of additional reserve capacity will be available as a last resort to meet tough winter peak conditions**



## De-rated margin for the whole winter...

<b>Total Generator Capacity</b>	<b>71.1 GW</b>
<b>De-Rated Generator Availability</b>	<b>58.2 GW</b>
<b>ACS Demand + reserve</b>	<b>55.9 GW</b>
<b>De-Rated Winter Margin</b>	<b>2.3 GW</b>
<b>De-Rated Winter Margin %</b>	<b>4.1%</b>
<b>Loss of Load Expectation</b>	<b>1.6hrs</b>
<b>Post DSBR/SBR De- Rated Winter Margin %</b>	<b>6.1%</b>
<b>Post DSBR/SBR Loss of Load Expectation</b>	<b>0.6hrs</b>

In addition to the new products, we have a range of operational tools to manage the system

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1	Market Actions	Communication (NISMs)
		Interconnector Trading
		Market provision of capacity
		Non BM STOR
2	New Balancing Services	DSBR and SBR
3	Emergency Actions	Voltage Reduction
		Max gen service
		Interconnector emergency assistance
		Demand reduction

## Electricity Summary

**De-rated margin is 4.1%, actual margins will depend on actual demand, generation availability and interconnector flows.**

**Margins tighter than in recent years but we have existing operational tools and new balancing services to manage this.**

**There is no room for complacency, but we have the right tools in place.**

