

## Winter Outlook

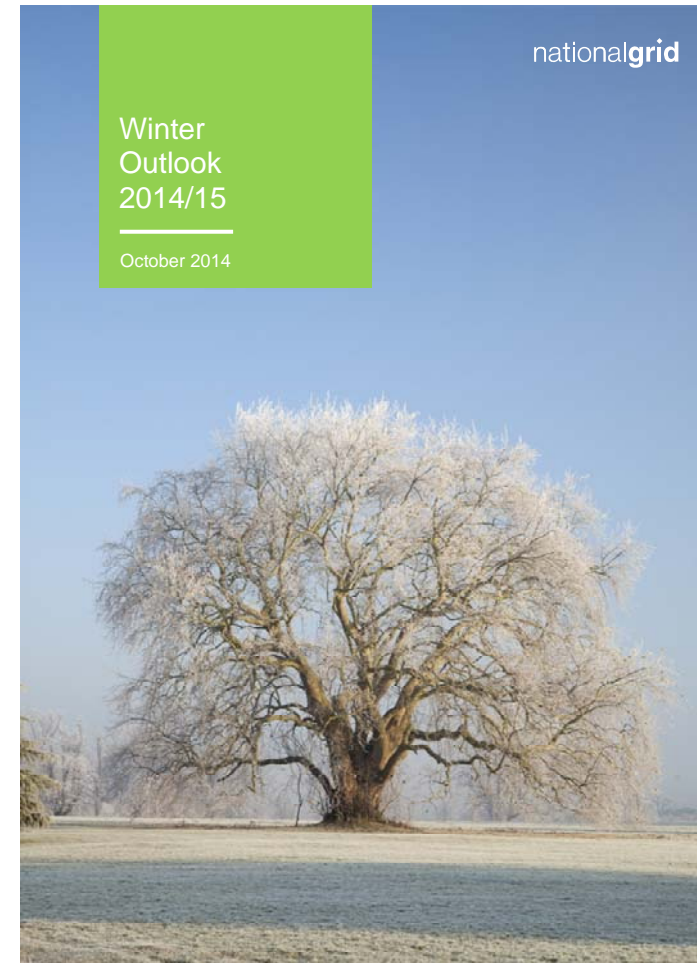


Mathew Hofton – Market Requirements Manager

## Winter Outlook Report 2014/15

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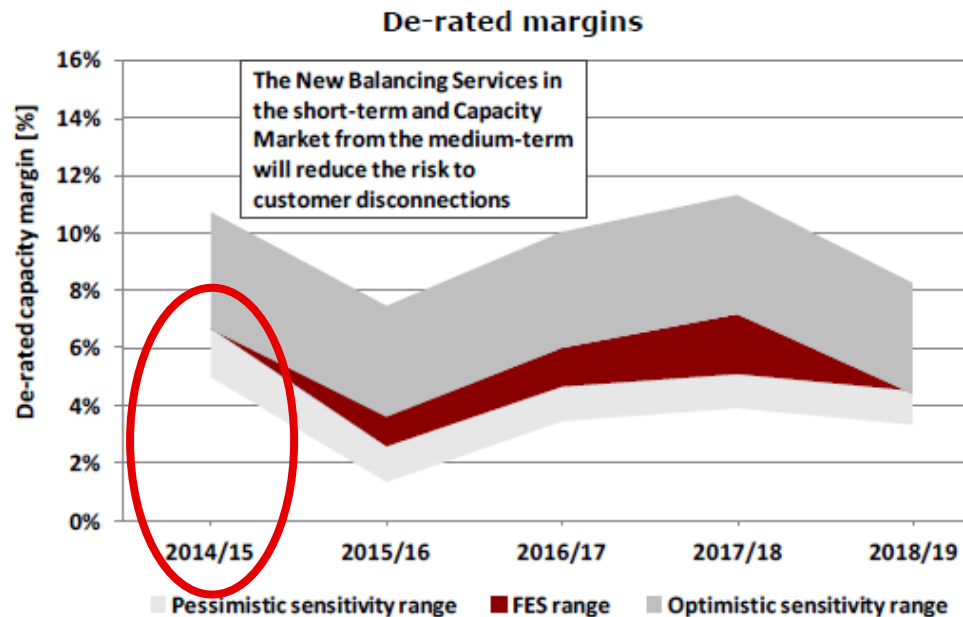
- Published on the 28<sup>th</sup> of October
- Outlook of supply and demand
- Winter Consultation feedback used to inform our analysis
- Margin analysis by two different methods
  - De-rated margin and Loss of Load Expectation
  - Weekly Operational de-rated margins



# Winter Consultation Responses

You said...	We did...
Stakeholders were not engaging with the process, with a low number of responses to recent Winter Consultations.	Enhanced and broadened engagement, enabled by the online questionnaire.
The report is technical and a glossary would be useful.	Developed an accessible and plain English glossary of terms, as well as fact sheets on a few important topics.
Only a slight increase in gas fired power generation will change gas demand from last year.	Updated our forecast using latest plant availability.
Gas prices will increase over the winter.	Assumed higher gas prices for the coming winter.
Consider a range of potential outcomes for the gas market due to the Ukrainian dispute.	Presented analysis of the capability of the gas market under four scenarios.
Use margin calculations and LOLE for electricity security of supply forecasts.	Included whole winter view in LOLE and a week by week detailed margin calculation.

# Capacity Assessment – Margins and LOLE



## Electricity Capacity Assessment Report 2014

### Annual report

**Publication date:** 30 June 2014

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#### Overview

This document is Ofgem's annual report to the Secretary of State assessing the risks to electricity security of supply in Great Britain for the next five winters.

Our assessment is based on data from National Grid accompanied by our own analysis. It suggests that, absent new measures that have been introduced, the risks to the security of our electricity supply over the next five winters would be broadly consistent with those in last year's report. Margins are expected to fall over the next two winters as older power stations close, before improving in the later years of our analysis.

Unlike last year, we now have new measures that were introduced by Ofgem, National Grid and the government. The New Balancing Services and the Capacity Market mean that the risk of disruption to customer supplies in the coming winters has reduced compared to last year's report.

## Two Methods

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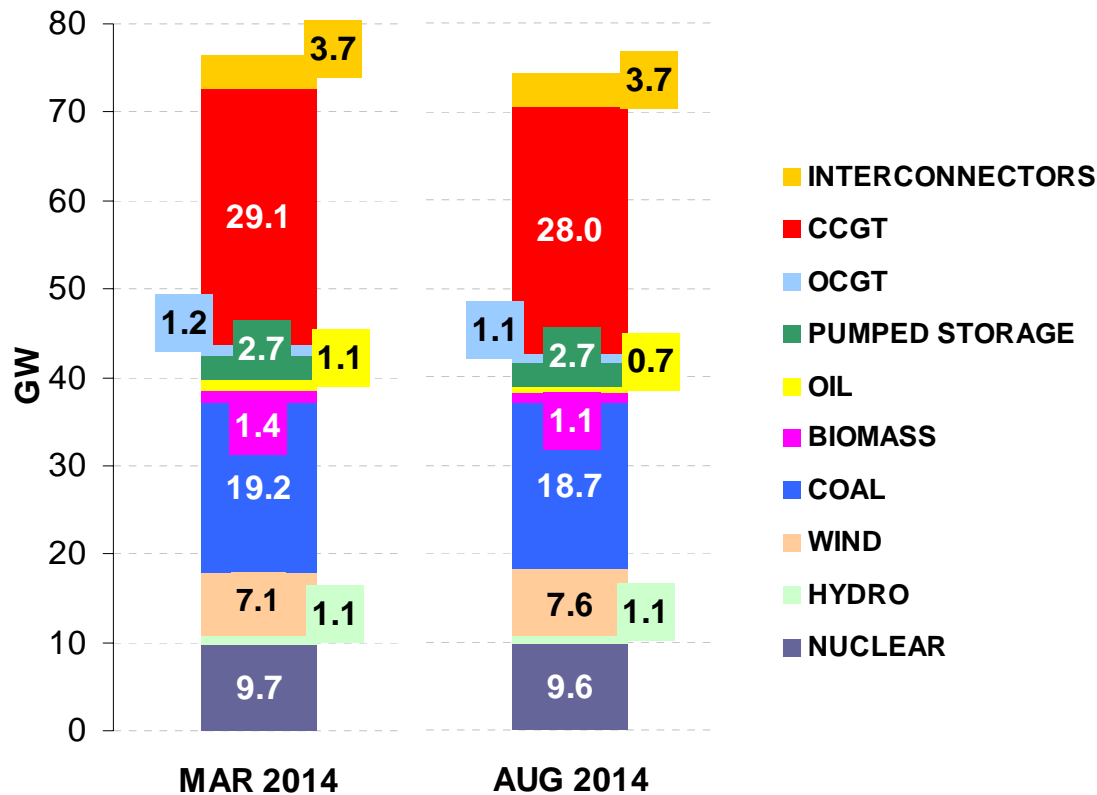
- De-rated margin and Loss of Load Expectation - Comparable to the Capacity Assessment
  - One figure for the winter - statistical measure
  - Uses the maximum submitted generation capacity over ACS, taking account of statutory and forced outages
  - Generation de-rated according to historical data
  - Compared to ACS demand, including 900MW of reserve
  - Converted to LOLE

## Two Methods

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- Weekly Operational de-rated margins - Winter Outlook Approach
  - Deterministic approach
  - Assesses each week of the winter
  - Generation de-rated according to historical data and type
  - Taking account of notified outage plans submitted up to the first week of October
  - Assumes outage plan does not change
  - Normal, ACS and 1 in 20 demand scenarios including 900MW of reserve

# Summer Generation Position



### Closures since last winter:

- Ferrybridge 1 and 2
- Ironbridge unit 1
- Uskmouth units 13&14

### Mothballed:

- Barking
- Keadby
- Kings Lynn

### Outages over winter:

- Ferrybridge unit 4

### Outage running into winter:

- Enfield Energy Centre
- Fiddlers Ferry unit 1
- Hartlepool unit 1&2
- Heysham 11&12
- Sizewell B

■ Overall generator capacity has dropped by 1.6GW to 70.9GW since the end of last winter

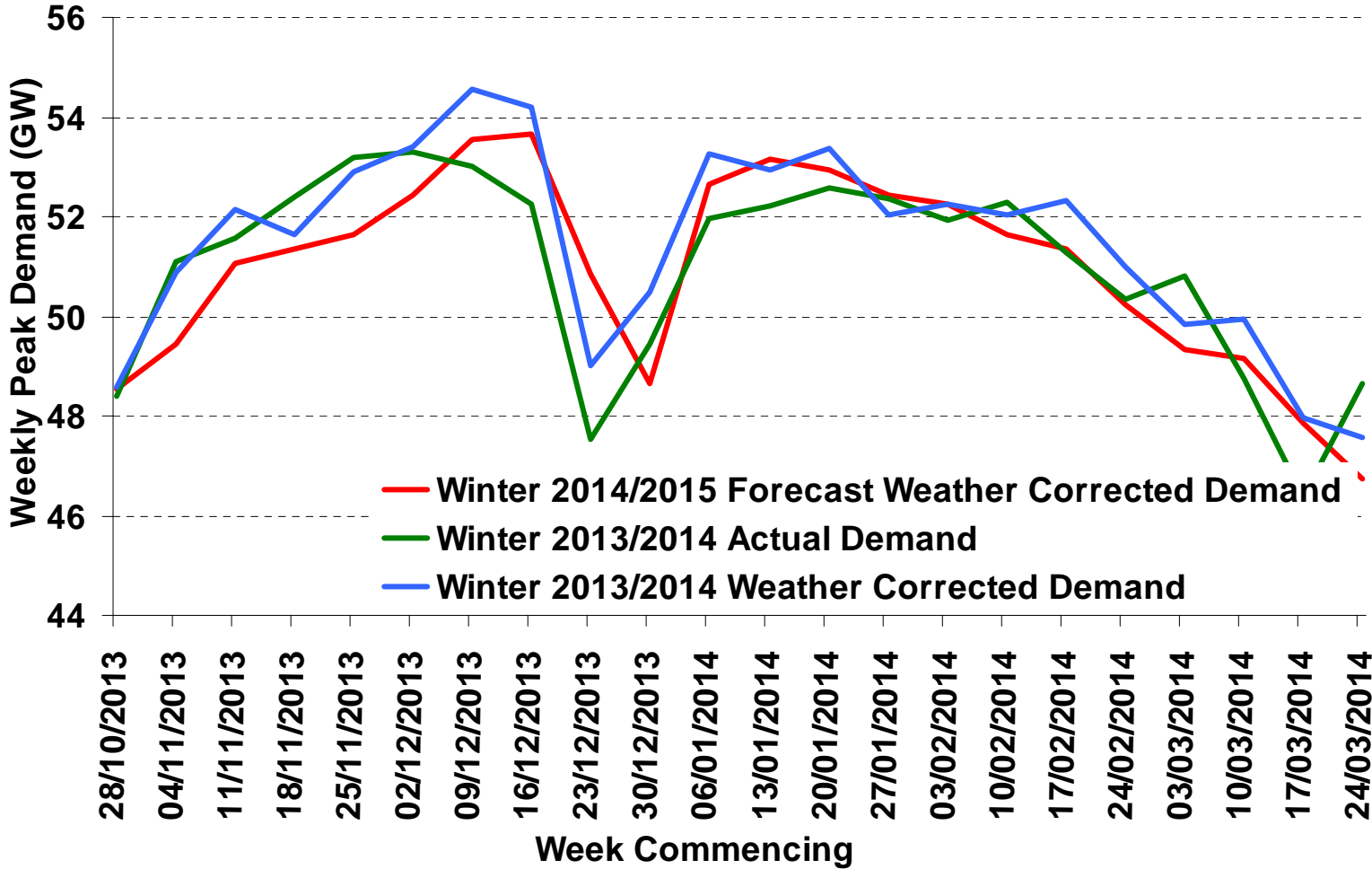
## Generation

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Power Station Type	Assumed Availability
Nuclear	90%
Hydro generation	88%
Wind EFC	22%
Coal + biomass	90%
Oil	79%
Pumped storage	98%
OCGT	97%
CCGT	87%



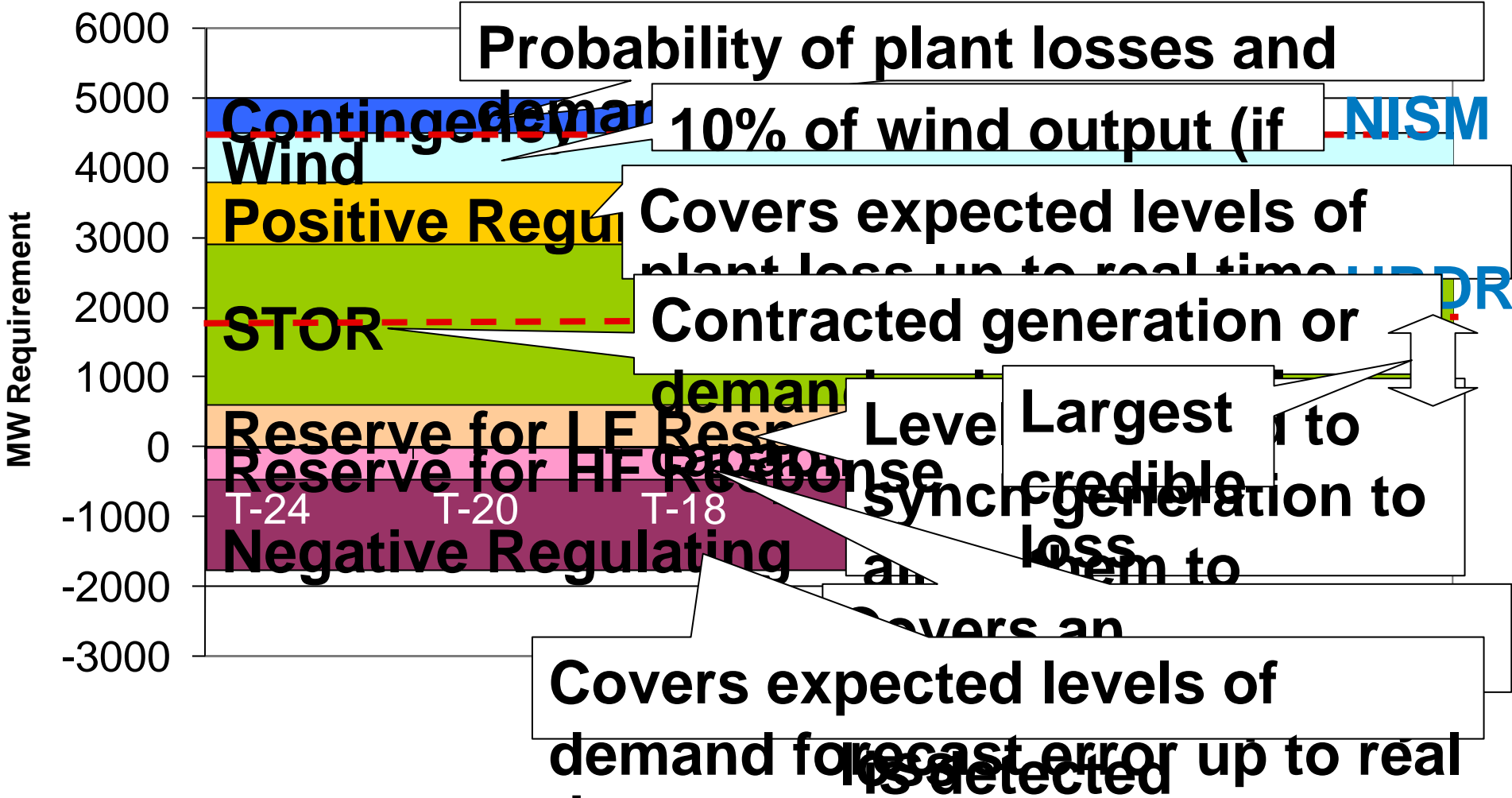
# Demand



- Forecast winter peak demand of 53.6GW, 2013 weather corrected outturn 54.2GW<sub>9</sub>
- ACS forecast is 55.0GW and 1 in 20 demand forecast is 56.3GW

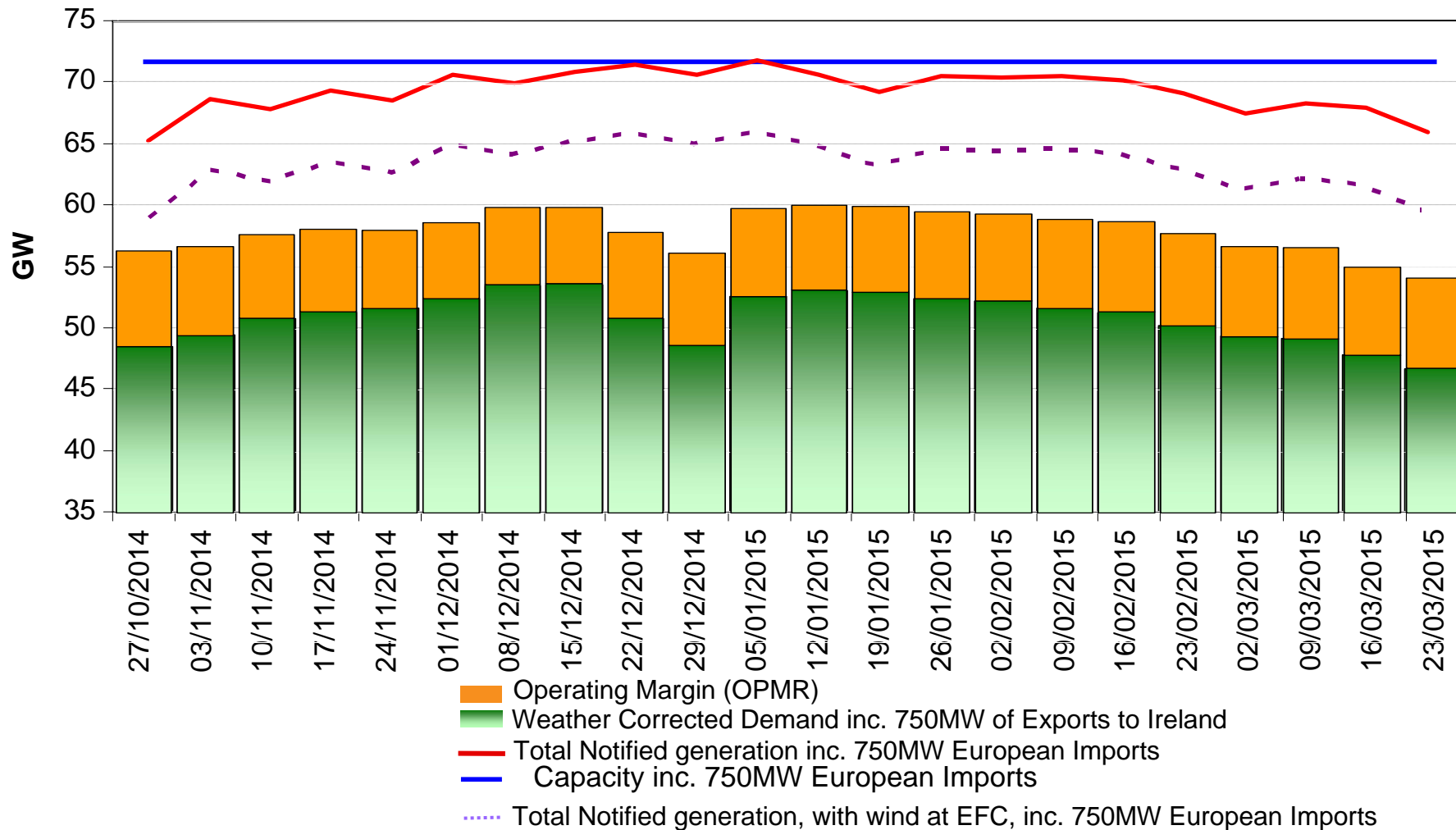
# Reserve Requirement (OPMR)

## Weekday Winter DP Reserve Levels

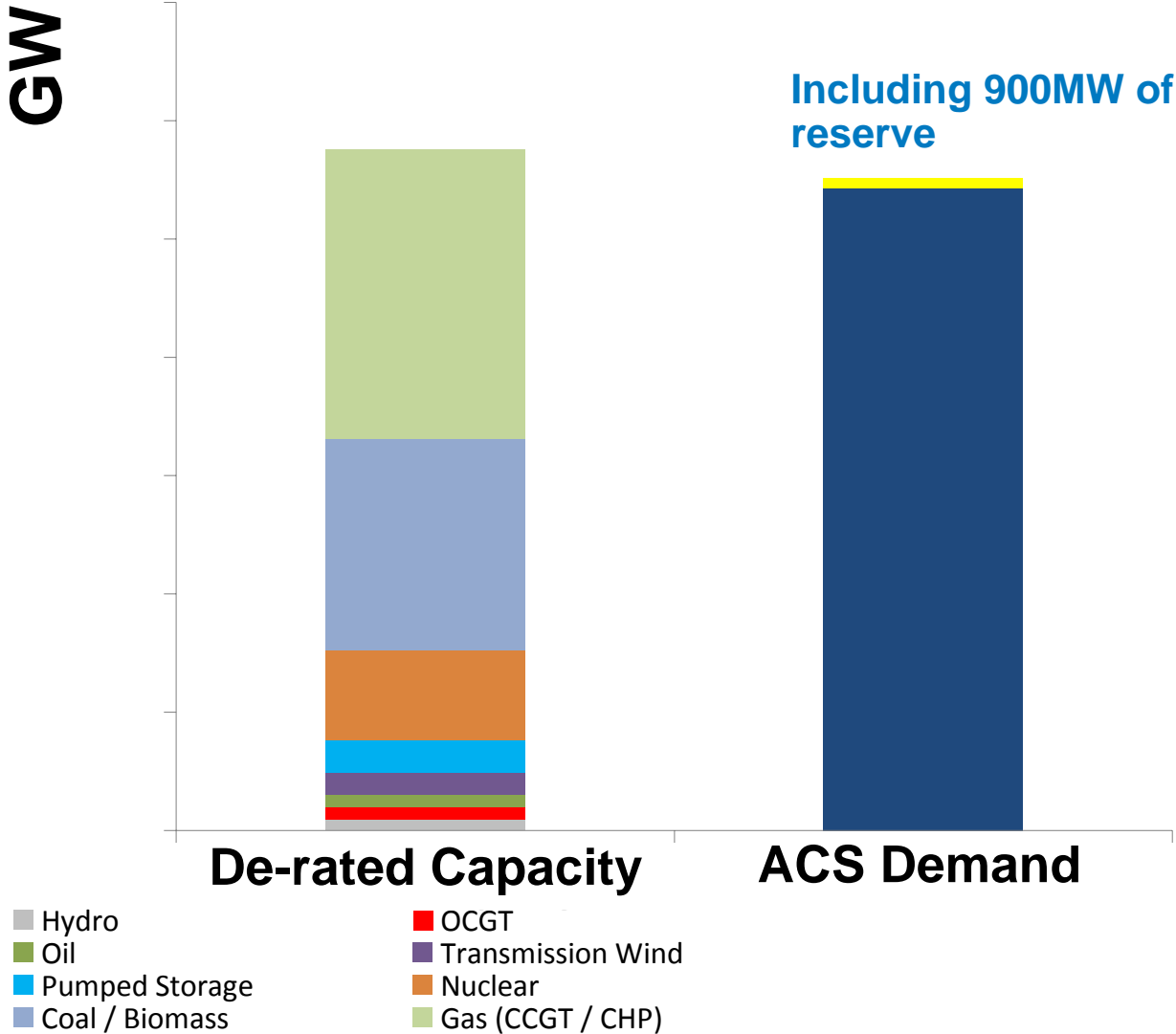


# Weekly Operational Margins

Weekly normal demand and notified generation availability



# Capacity Assessment Approach



## Summary

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- Capacity Assessment Approach
  - One headline margin figure based on the Capacity Assessment approach
  - Derived LOLE taken from similar scenarios in the Capacity Assessment
  
- Weekly Operational Margins
  - Margin figures for each week of winter using traditional method
  - Normal demand, ACS and 1 in 20 demand scenarios



# Q&A

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