

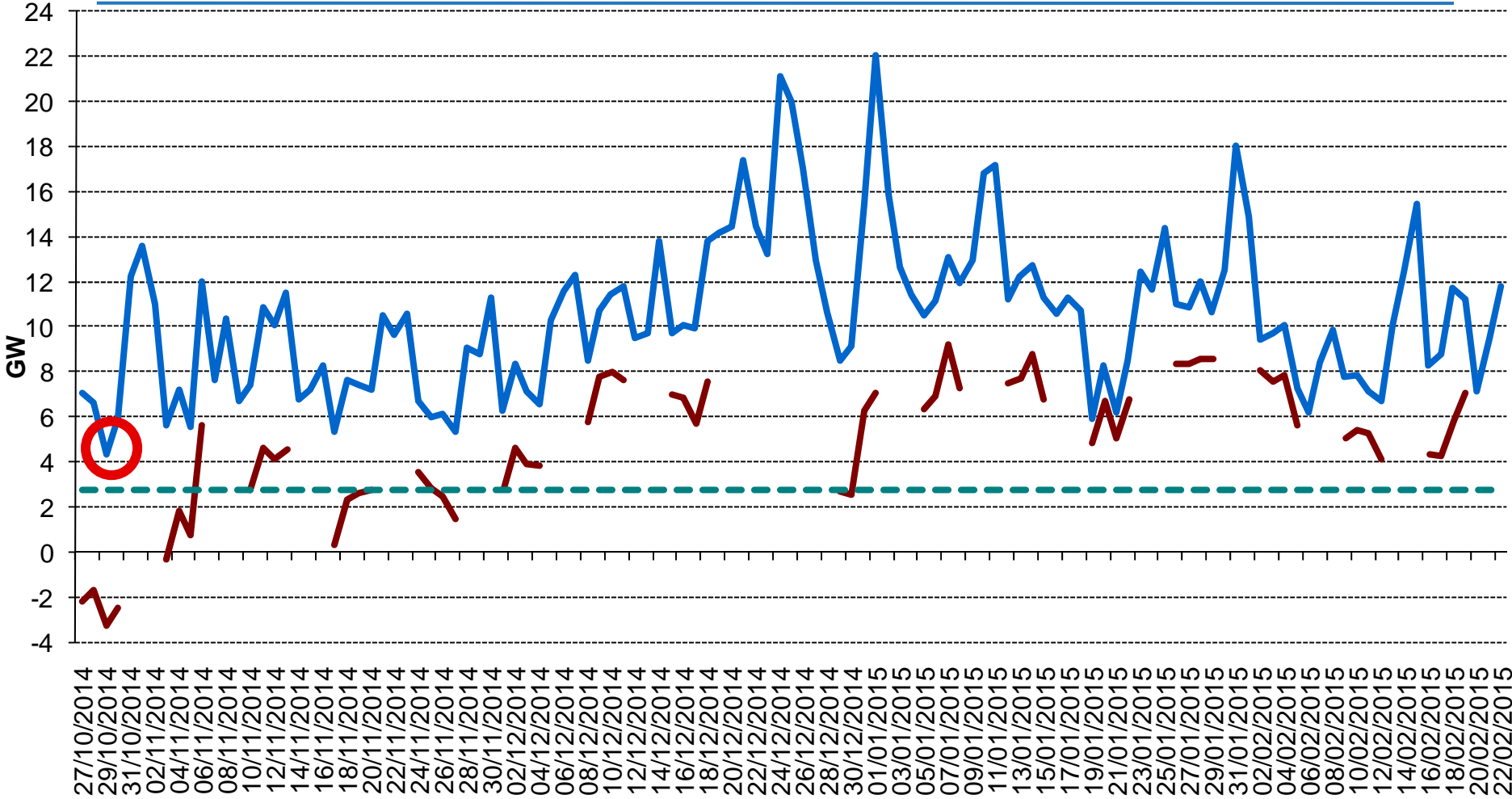
Managing the System in Winter 14/15 and Summer Outlook Preview

Mat Hofton

Summary

- Mild winter
- Contingency services not used
- Last machine made ready on 4 occasions
- Lowest peak demand in 10 years (53.2GW)
- If demand had been around the Average Cold Spell peak (55GW) SBR/DSBR would have been used
- Tightest outturn margin seen was 4.4GW

Outturn margins this winter



— Actual Margin — Margin with ACS demand, actual wind & ICs - - - NISM Trigger

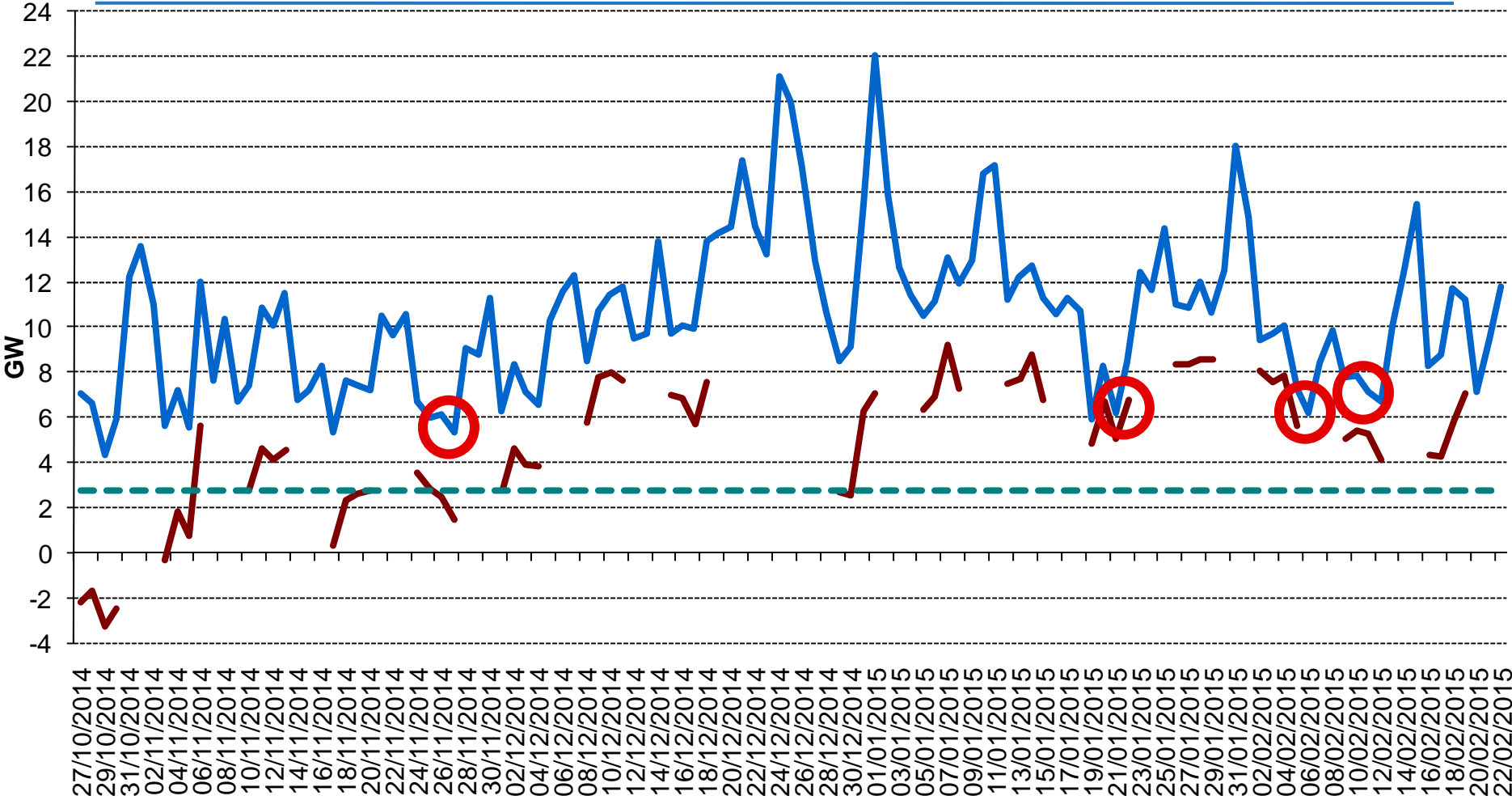
29th October 2014 plant margins

- Shoulder period of the year, where demand is ramping up and generators are returning from planned outages.
 - Total 9.2GW of plant on planned outage, 5.0GW of conventional, 4.2GW of nuclear
 - Total 5.3GW of plant with delayed return to service dates, 2.9GW of conventional and 2.4GW of nuclear
- **Assessment at 1600hrs on 28th for Wednesday 29th October:**
 - Indicated one large machine loss (c. 500MW) away from NISM over the peak period
- Major differences from Tuesday peak:
 - wind output down by c. 2.5GW
 - demand forecast up by c. 1GW

29th October 2014 plant margins

- **Re-assessed at 2000hrs:**
 - margin improved somewhat to 1GW from NISM trigger level
- Major Changes:
 - Didcot B5 now available and assumed running at 380MW
 - Planned to warm Littlebrook 1 machine
- **Assessment made at 02:00hrs on Wednesday 29th October:**
 - improved again from NISM trigger to 1.6GW surplus
- Major changes since 20:00 update
 - Ryehouse 1 additional GT 250MW
 - Peterborough 1 additional 240 MW
 - Other small gains vs losses 100MW
 - Didcot B5 synchronised 60 MW output
- Decision made not to warm Littlebrook 1

Outturn margins this winter



Actual Margin

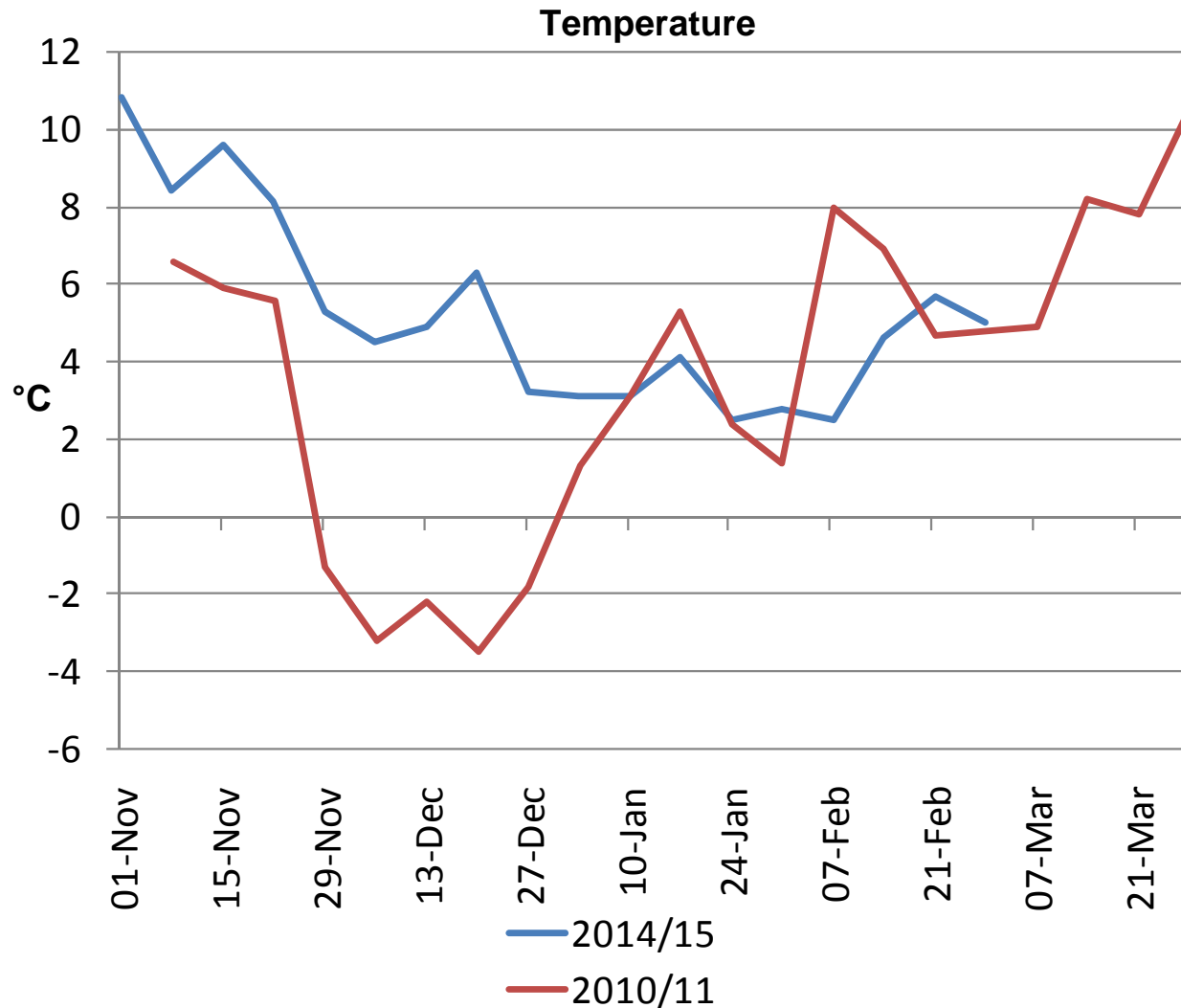
Margin with ACS demand, actual wind & ICs

NISM Trigger

Tight margin days

- Last available plant warmed for contingency on 4 occasions, but stood down as risk reduced closer to real time
- Risk developed in planning timescales due to a combination of plant breakdowns, low wind and interconnector capacity reduction.
- Example: Wednesday 21/01/15
 - 5GW of plant on breakdown, 2GW on planned outage
 - 53GW demand
 - Temperature was 3.1 degree C
 - 500MW of wind forecast
 - 500MW interconnector capacity reduction
 - Real time margins were adequate c. 6GW

Temperatures and Demand



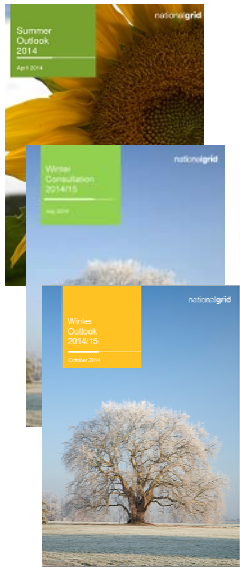
Financial Year	Actual TSD (GW)	Weather corrected TSD (GW)
2005/06	60.3	60.0
2006/07	58.4	59.6
2007/08	60.6	59.5
2008/09	59.2	56.8
2009/10	59.2	56.2
2010/11	60.0	57.6
2011/12	56.3	54.7
2012/13	56.7	54.9
2013/14	53.2	54.6
2014/15	53.8	53.2

Summer Outlook Preview

- Summer System Operation
- Low demand periods
- Transmission System Voltage
- System Inertia
- RoCoF
- System Operation Case Study
- Balancing the System on difficult days
- **Publication date: 9th April**



Outlooks Review



Our annual Market Outlook documents present a view on security of supply for the summer and winter.

Increased in importance and profile due to recent concerns regarding security of supply on the electricity and gas networks.

**Winter Outlook 2014:
> 2500 downloads**

We are reviewing the whole suite of short term Market Outlook documents, including the Summer Outlook, Winter Consultation and Winter Outlook.

We want to make them better meet the needs of their growing audience.

As important stakeholders of the document we want your views.

This is an opportunity to shape how we report on security of supply for the summer and winter.

Please complete the feedback survey that we will circulate to you.

Here's the link: <https://www.surveymonkey.com/r/OutlooksReview>



Q&A

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