

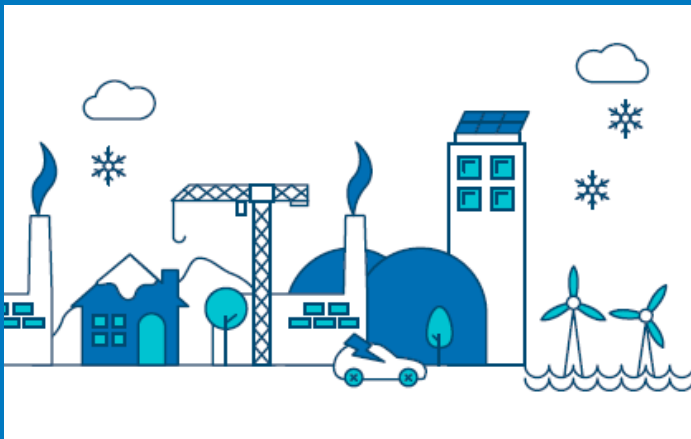
Winter 2016/17

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Content


- Winter Outlook key messages
- What's different for this winter?
- System to Market notices
- Capacity Market Notices recap
- Comparison of CMN & De-rated Margin calculations
- Operational winter scenarios

Winter Outlook 2016/17




Cathy McClay – Head of Commercial Electricity

Winter Outlook Report 2016/17

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- Electricity margins have improved since July's Winter Consultation.
 - Contingency balancing reserve services procured.
 - Updated and new notices for communicating system conditions.
 - Diverse and flexible sources of gas supply to meet demand.
 - Our stress tests show that there is a low risk to gas security.

Your feedback has improved the Winter Outlook Report

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- Interactive document to help you find the information you need quickly and easily.
 - Key messages and terms explained in each chapter.
 - Operational toolbox to help you understand the different electricity notifications.
 - Spotlights on the changing energy market.

Electricity outlook



Electricity key messages



The de-rated margin is similar to last year, but includes a larger proportion of supplemental balancing reserve services.

Updated and new electricity notifications this winter to communicate system conditions to the market.

The weekly forecast changes throughout the winter. Access the latest operational data via BM Reports.

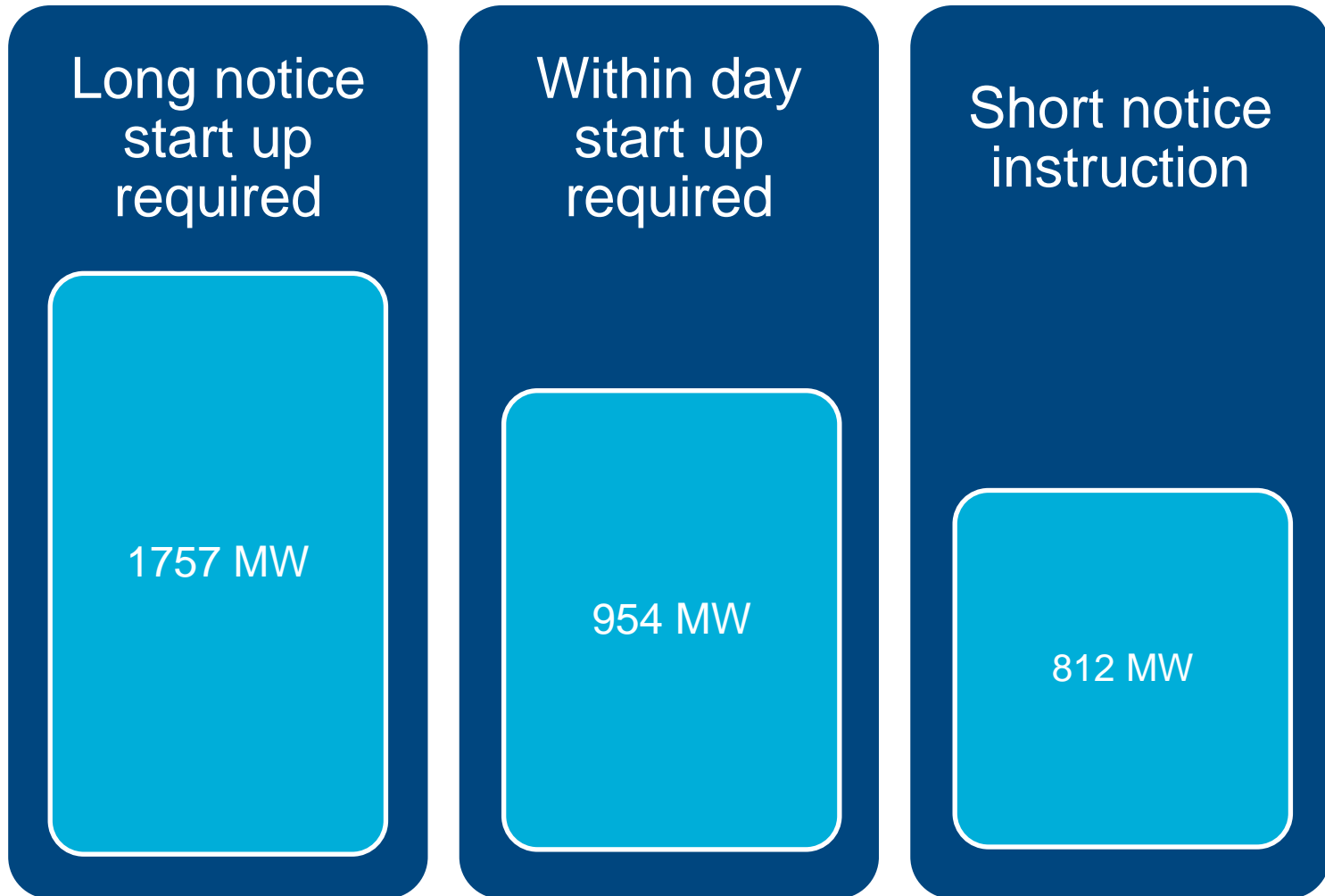
The winter view

Improved outlook since publishing the Winter Consultation in July 2016

De-rated capacity margin (%)		6.6 %
Loss of load expectation		0.5 hours/year
Generation	Demand*	Interconnectors
73.7 GW total	52.7 GW	2.0 GW net imports
55 GW de-rated	0.9 GW reserve	
3.5 GW SBR		

* ACS peak transmission system demand

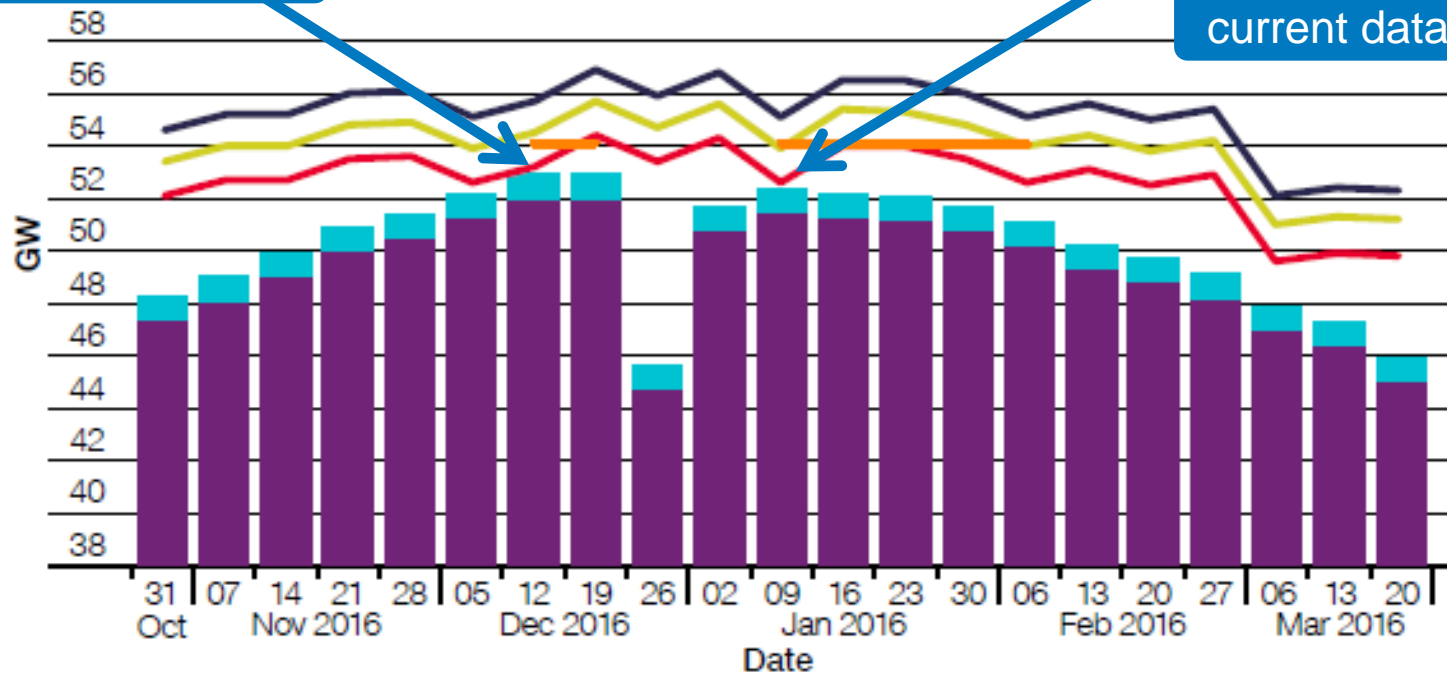
The profile of SBR has changed



Operational view

Expected peak demand

Expected lowest operational surplus based on current data

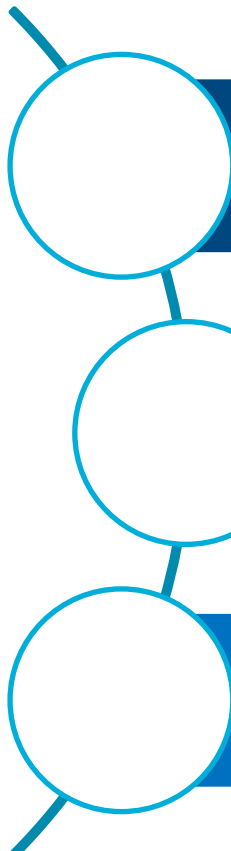


- Reserve requirement
- Peak weekly normalised demand
- Average cold spell demand
- Assumed generation with low imports from Continental Europe and SBR
- Assumed generation with medium imports from Continental Europe and SBR
- Assumed generation with full imports from Continental Europe and SBR

Gas outlook



Gas key messages



Demand is expected to be lower than last year's weather corrected demand.

Diverse and flexible supplies of gas sufficient to meet demand.

Our stress tests show that supply disruptions pose a low risk.

Beyond the Winter Outlook Report



We want to help you to keep up to date

View the full interactive report online.

Review the latest operational data.

Subscribe to receive notifications.



What's different for this winter?

Electricity Margin Notices

- NISM changed to EMN from 30 September
- More accurate view of system status
- Provides clarity in winter where Capacity Market Notices become active
- No change to any associated operational procedures

Long notice SBR

- Methodology / process updated to warm long notice SBR plant
- Operational messages on BMRS continue in advance of SBR dispatch and EMN issued prior to SBR dispatch
- SBR dispatched after all other market actions taken
- Additional information on SBR webpages

Capacity Market Notices

- Learning opportunity in 16/17 Transition Period
- 4hr / 500MW constants
- CMNs not intended to be a dispatch signal so continue to observe BMRS operational messages
- “Ready for change” article on Connecting website and FAQ content on website gbcmn.nationalgrid.co.uk

System to Market notices

Electricity Margin Notice

High Risk of Demand Reduction

Demand Control Imminent

Supplemental Balancing Reserve Warming Notices

Capacity Market Notice (Subscription only)

General Information

BMRS &
fax

BMRS

EMRSO

NG &
EMR
Websites

Capacity Market Notices (CMNs) Recap

- Notice to market **4 hours ahead** of real time (System Margin calc)
- Given where **expectation of a Stress Event** is higher than a threshold
- Settlement tool; **not an operational dispatch signal.**
- Observe BMRS** for traditional warnings and Demand Control Events

Capacity Market Notice

Automated

500MW above Margin requirement

Not included

4 hours out (for initial alert)

vs

Trigger

Threshold

Constraints

Lead time

Electricity Margin Notice

Manual

500-700MW below Margin requirement

Included

Flexible

CMN Calculation vs De-Rated Margin (DRM) Calculation

CMN and DRM calculations diverge reflecting the differences in their design

DRM Calculation

Inform gate closure LoLP / RSP where 50% potential of DCE if 0MW

Medium

Requirement to meet real time fixed Largest Loss (Reserve & Response)

Day Ahead / 8hr / 4 hr / 2hr / 1hr (De-rating / reserve apply equally)

Simplified

MELs derated by ~1% to cover losses post gate closure

vs

Purpose

Complexity

Margin

Frequency

Dynamics

Other

CMN Calculation

Reflection of ENCC System Operating Plan @ 4 hrs out

High

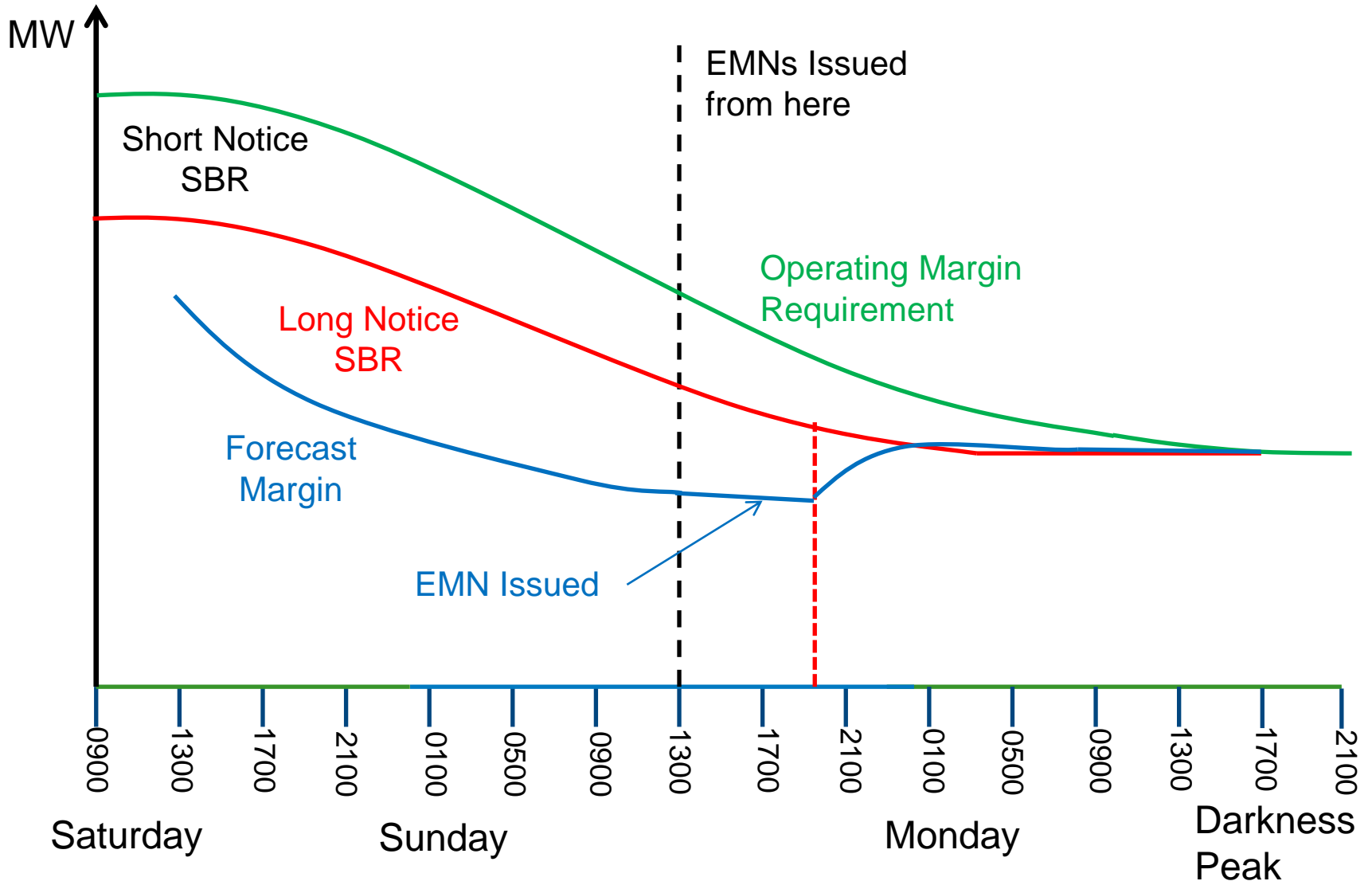
All reserve and response requirements at 4 hrs out

Single calculation for each SP

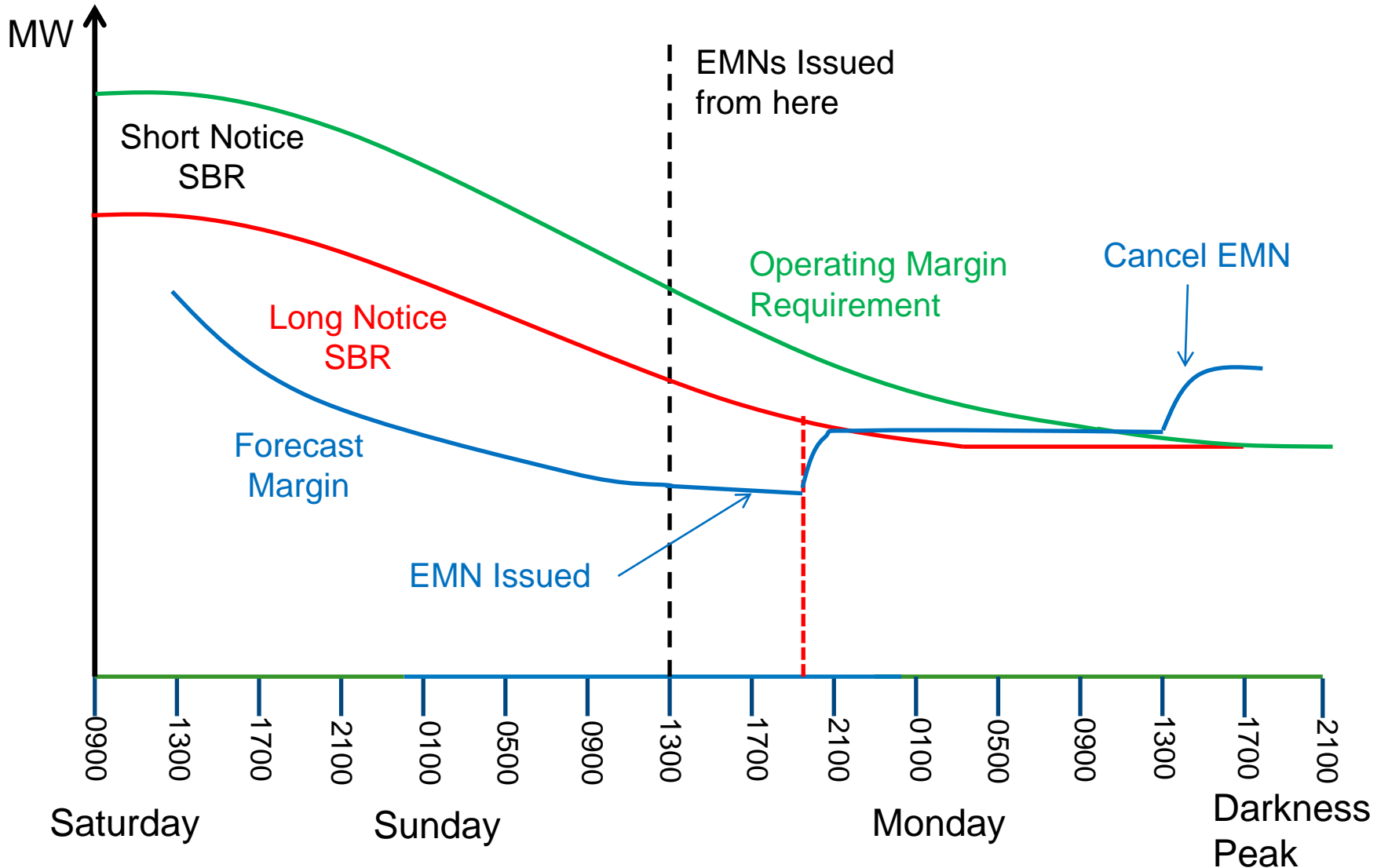
Optimised (including ramping / warmth)

Subject to additional separate 500MW threshold trigger

SBR Scenario 1



SBR Scenario 2



Q&A

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