

# July 14th - A day in the life...

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# Introduction

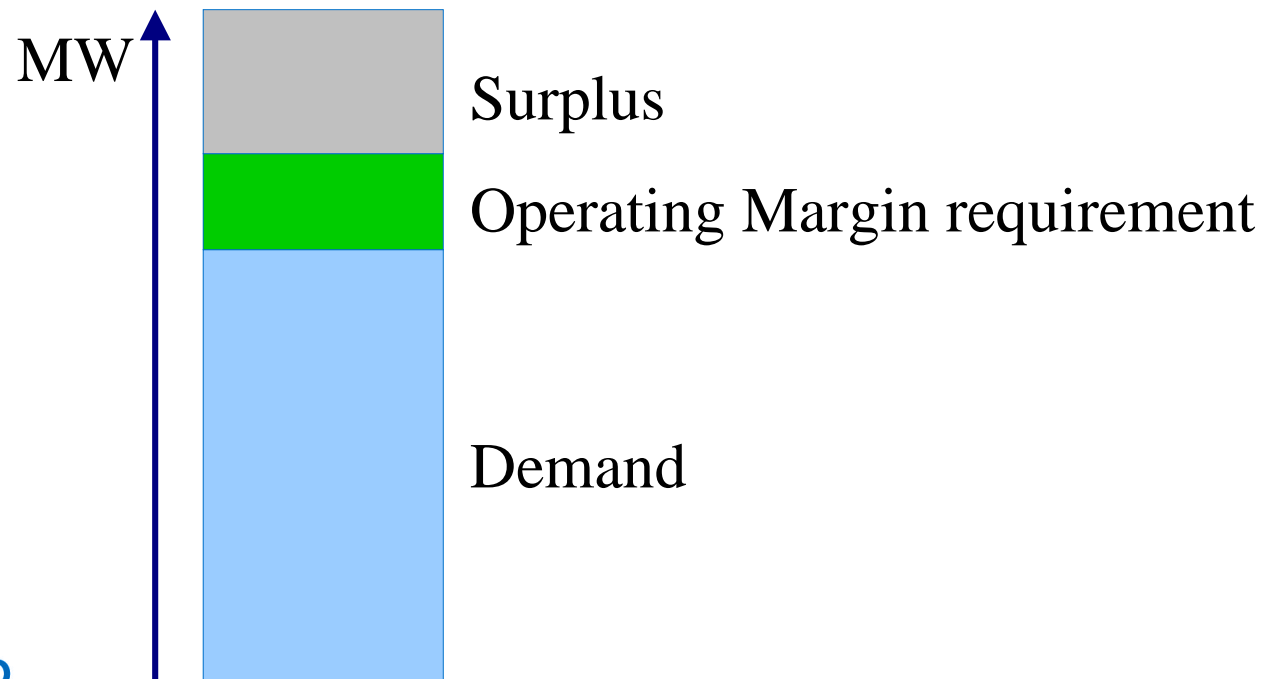
- This presentation sets out the circumstances and consequences of balancing actions relating to Monday 14<sup>th</sup> July. That day saw the highest spend on balancing actions this financial year and most severe margin shortfalls to date.

# What made Monday 14th July 2003 so special?

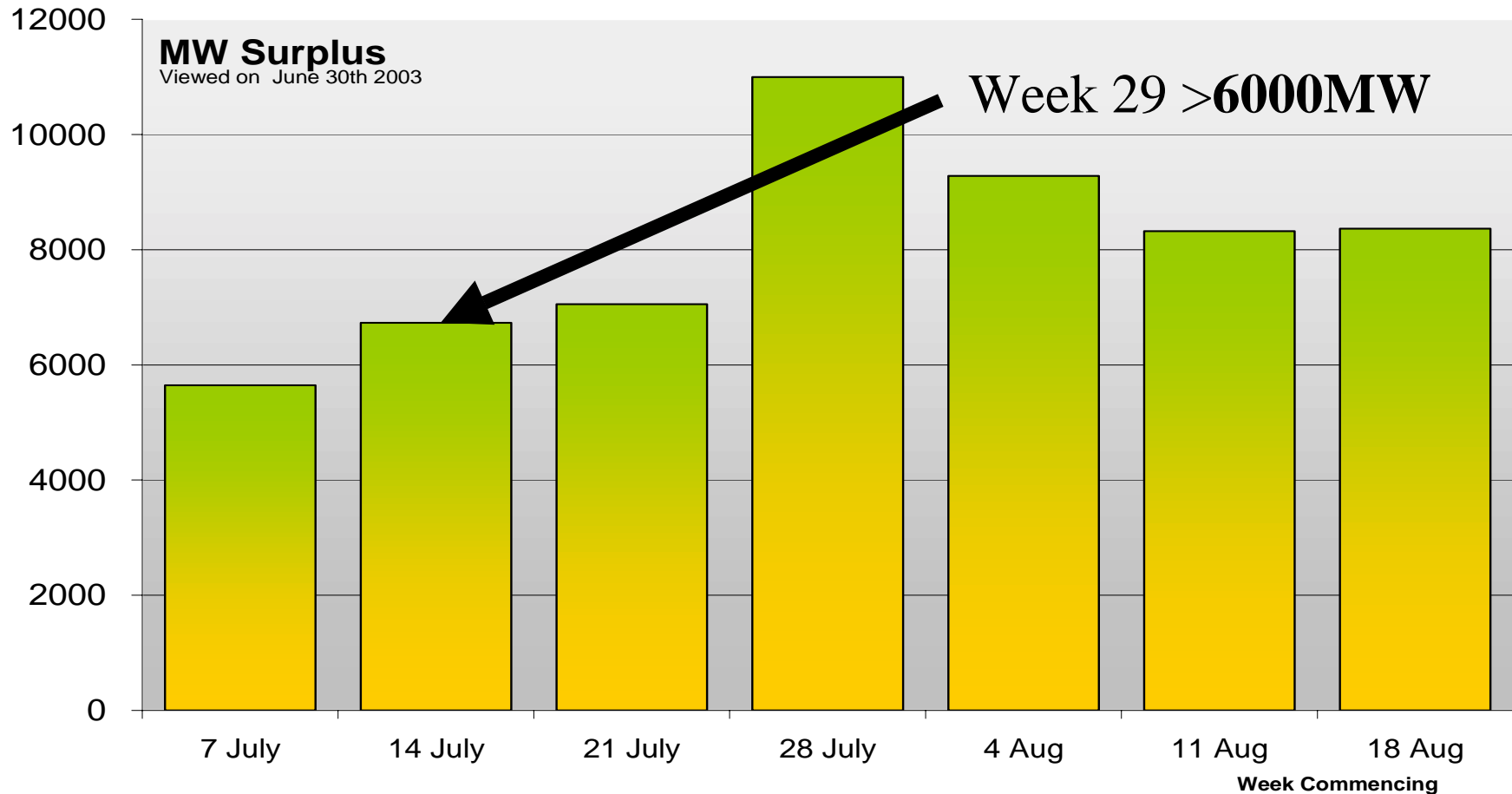
- It was the hottest day of the year so far
- Extreme margin shortfalls were experienced
- There was record spend in the Balancing Mechanism

# Margin / surplus

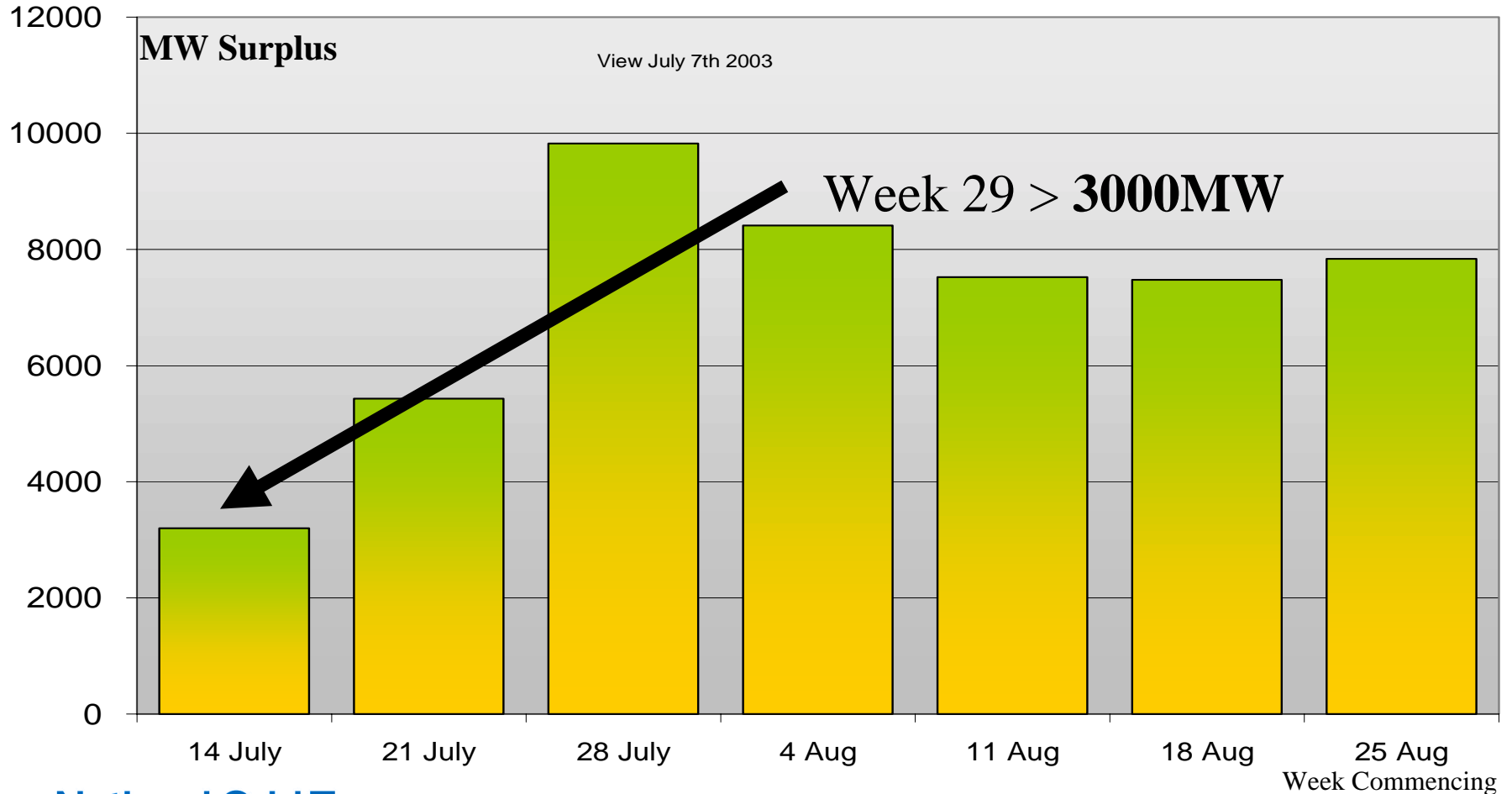
- Margin is a relationship between Demand and Generation
- Surplus is the amount of generation above the margin requirement



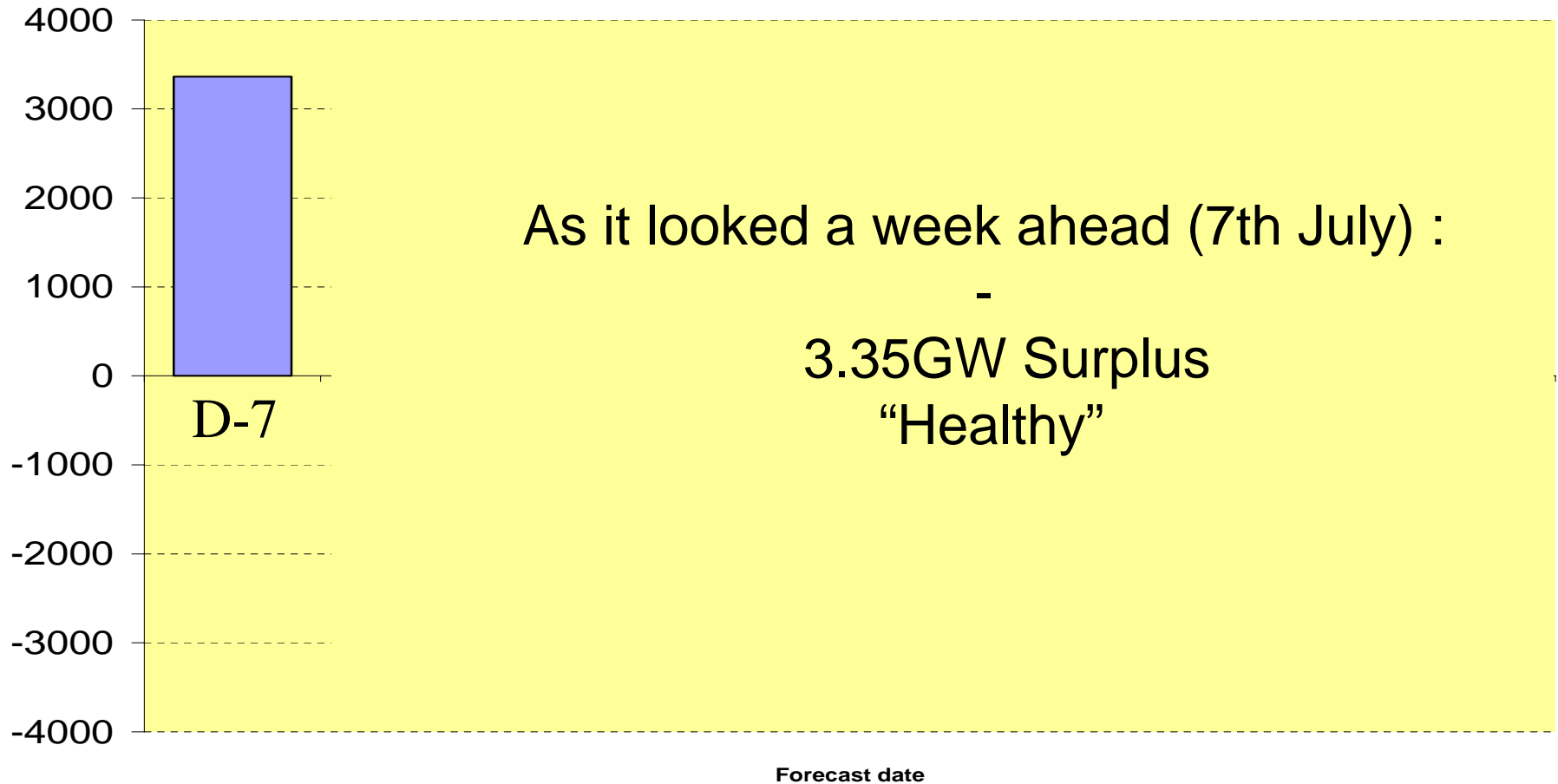
# Surplus Generation Requirement for week 29 as seen on 30th June 2003, BM Reports website



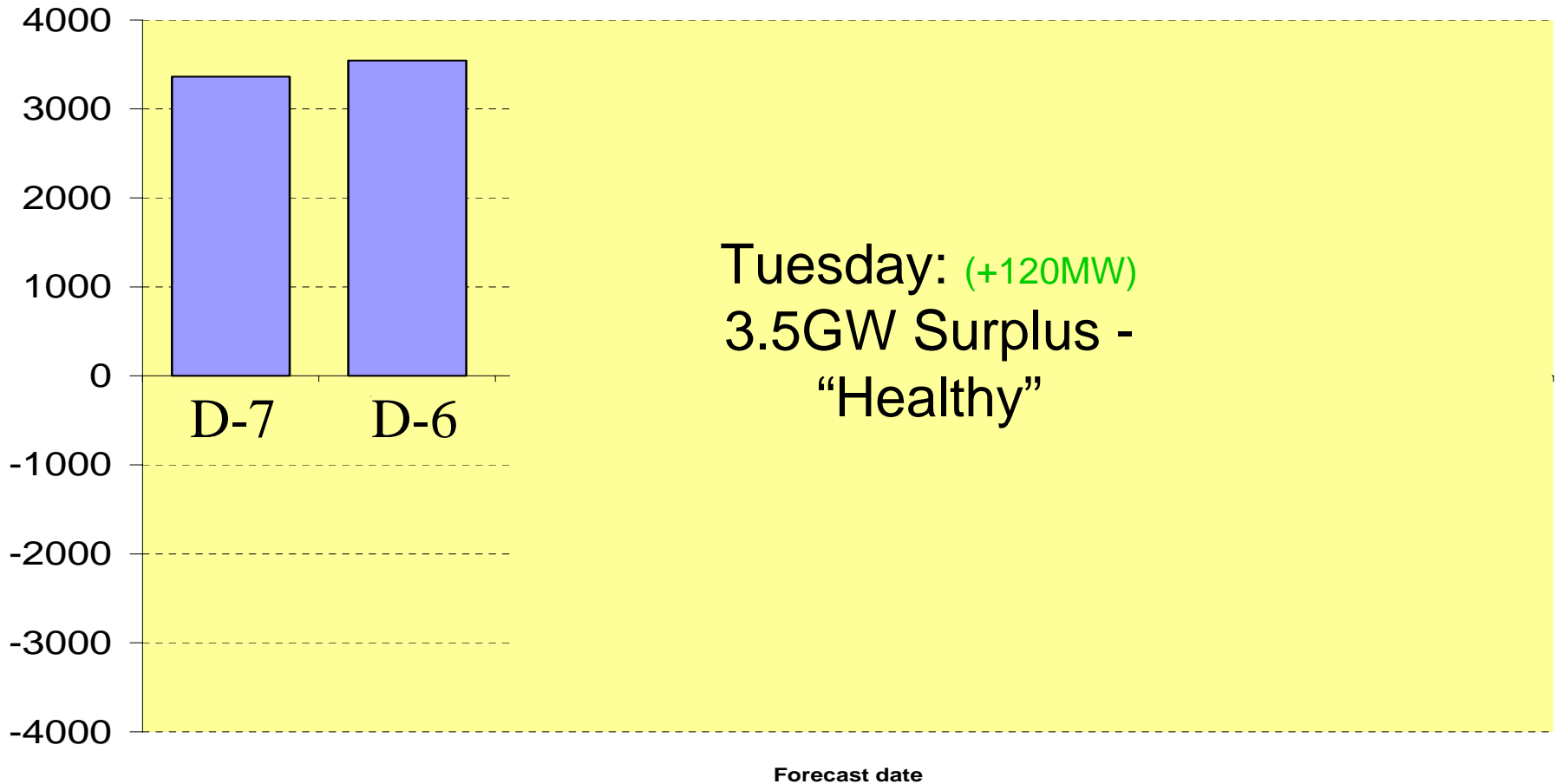
# Surplus Generation Requirement for week 29 as seen on 7th July 2003, BM Reports website.



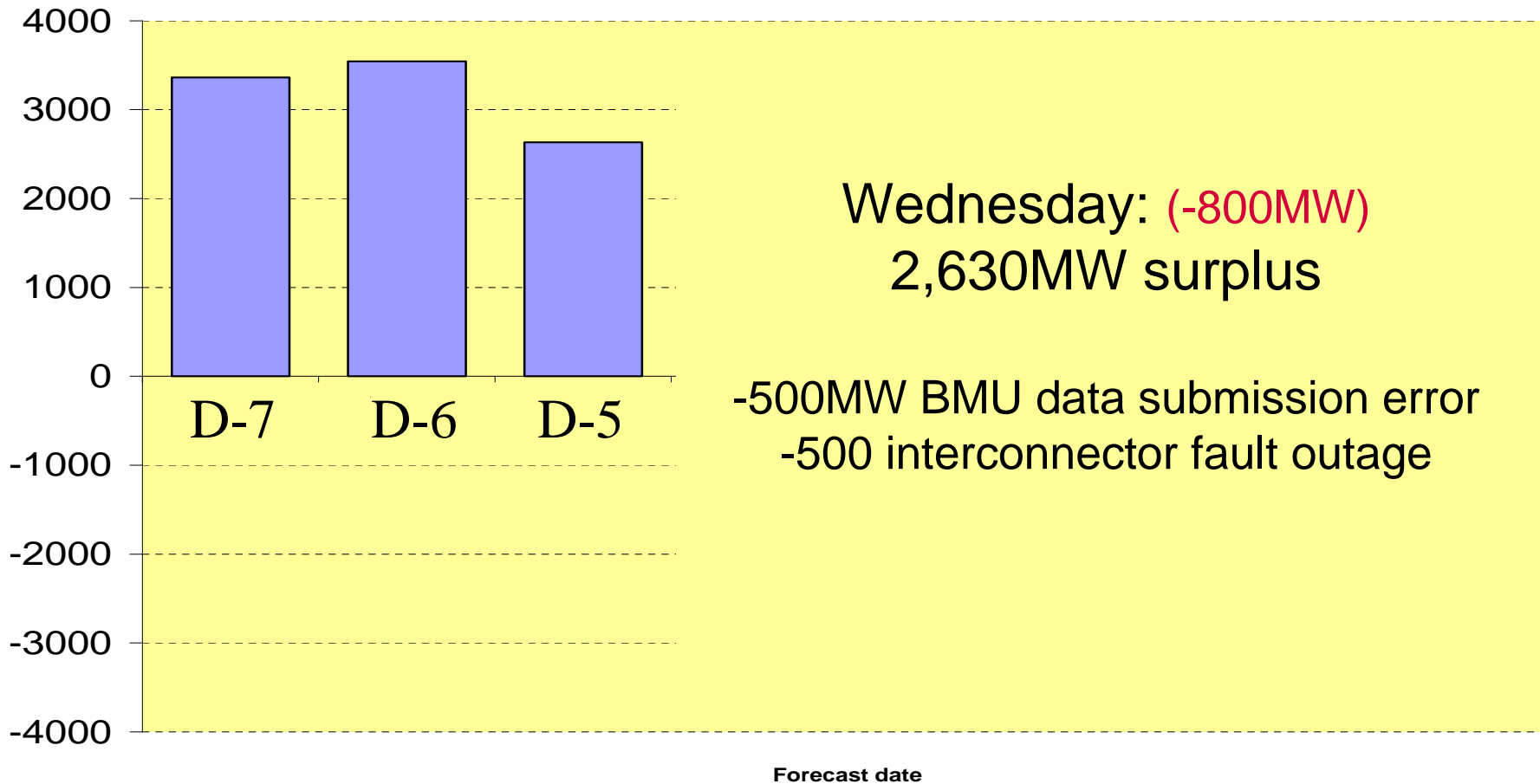
# Surplus on Monday 14th July - view during previous week



# Surplus on Monday 14th July - view during previous week



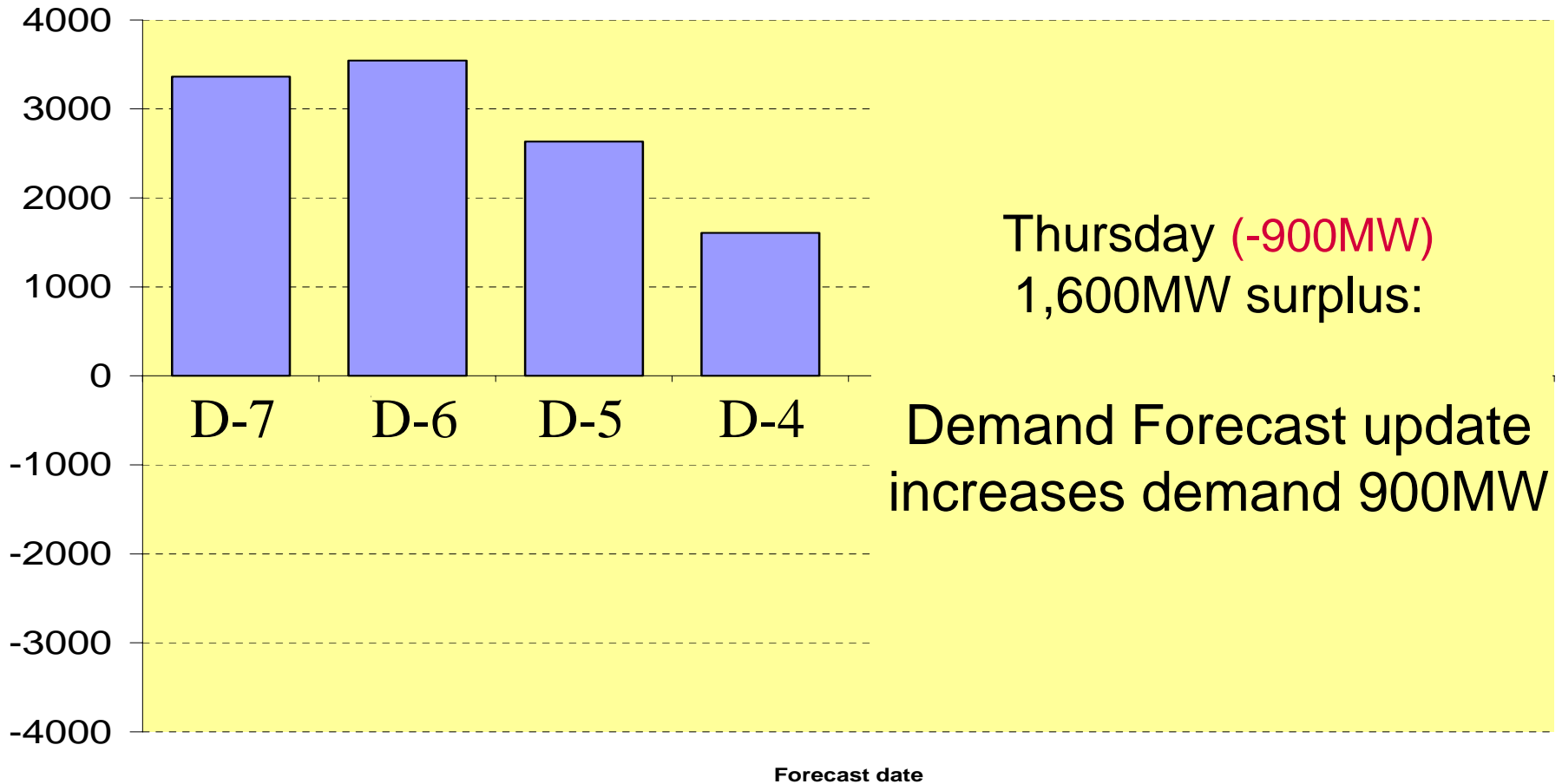
# Surplus on Monday 14th July - view during previous week



# OC2 submissions

- We are required to publish notified plant data on the BMRS website
- Process relies on accurate and reliable data from the Market participants - anomalies are discussed with participants.

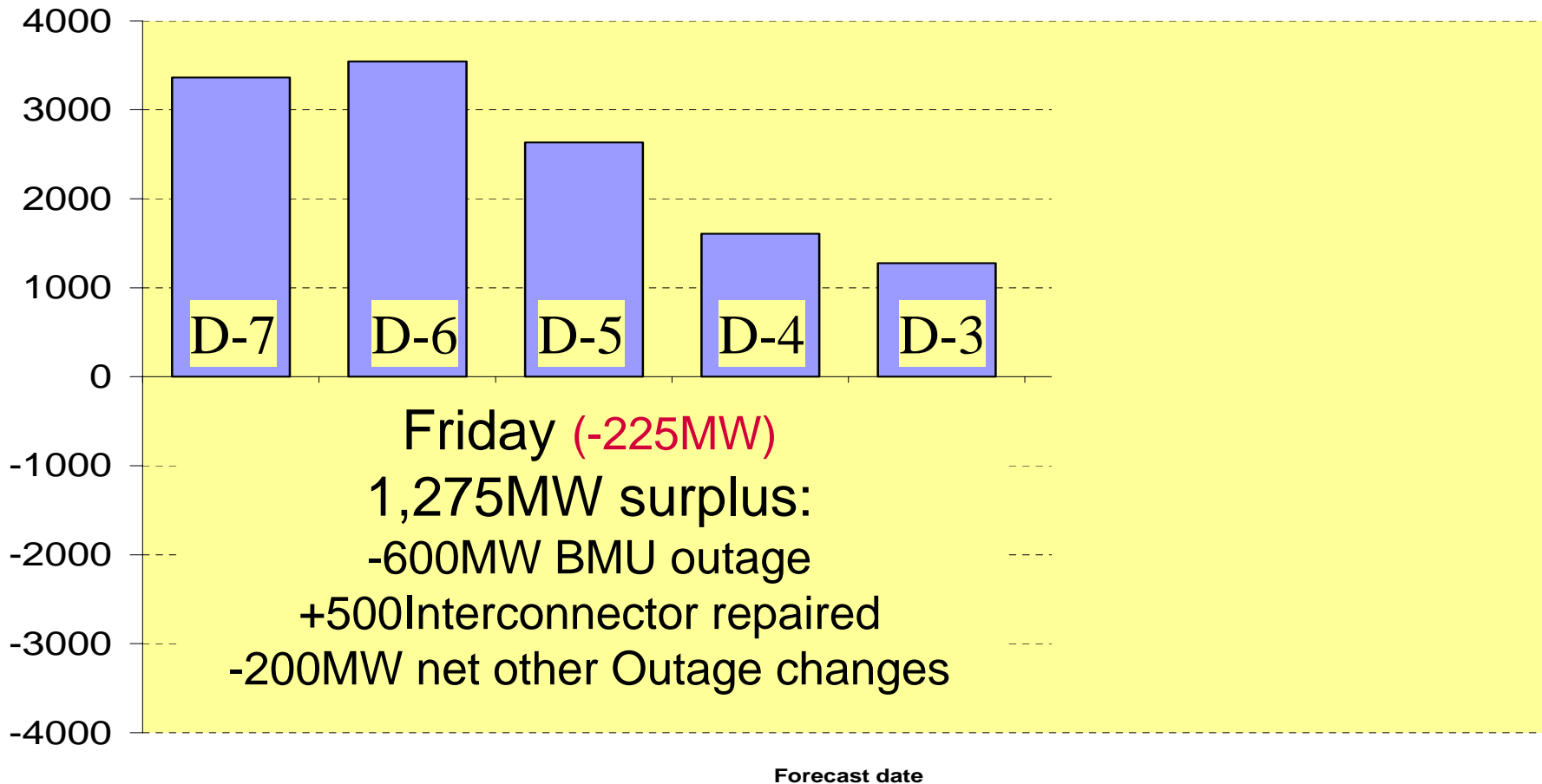
# Surplus on 14th July - view during previous week



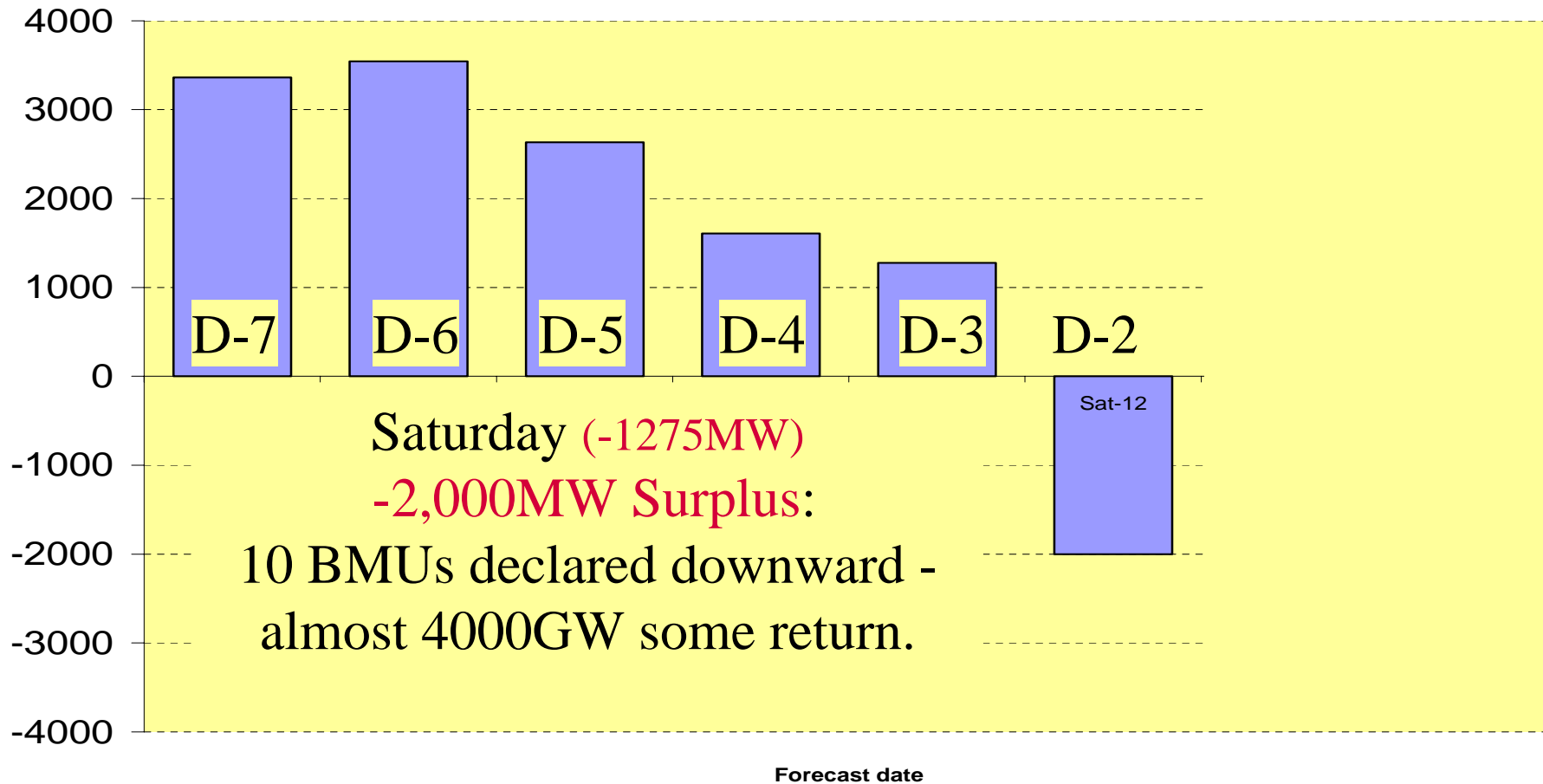
# Monday July 14th 2003 - Demand

- Heat-wave continuing
  - Air conditioning / re Fridgeration load
  - Peak reactive demand expected
- Thursday demand forecast added 900MW - proved correct on the day

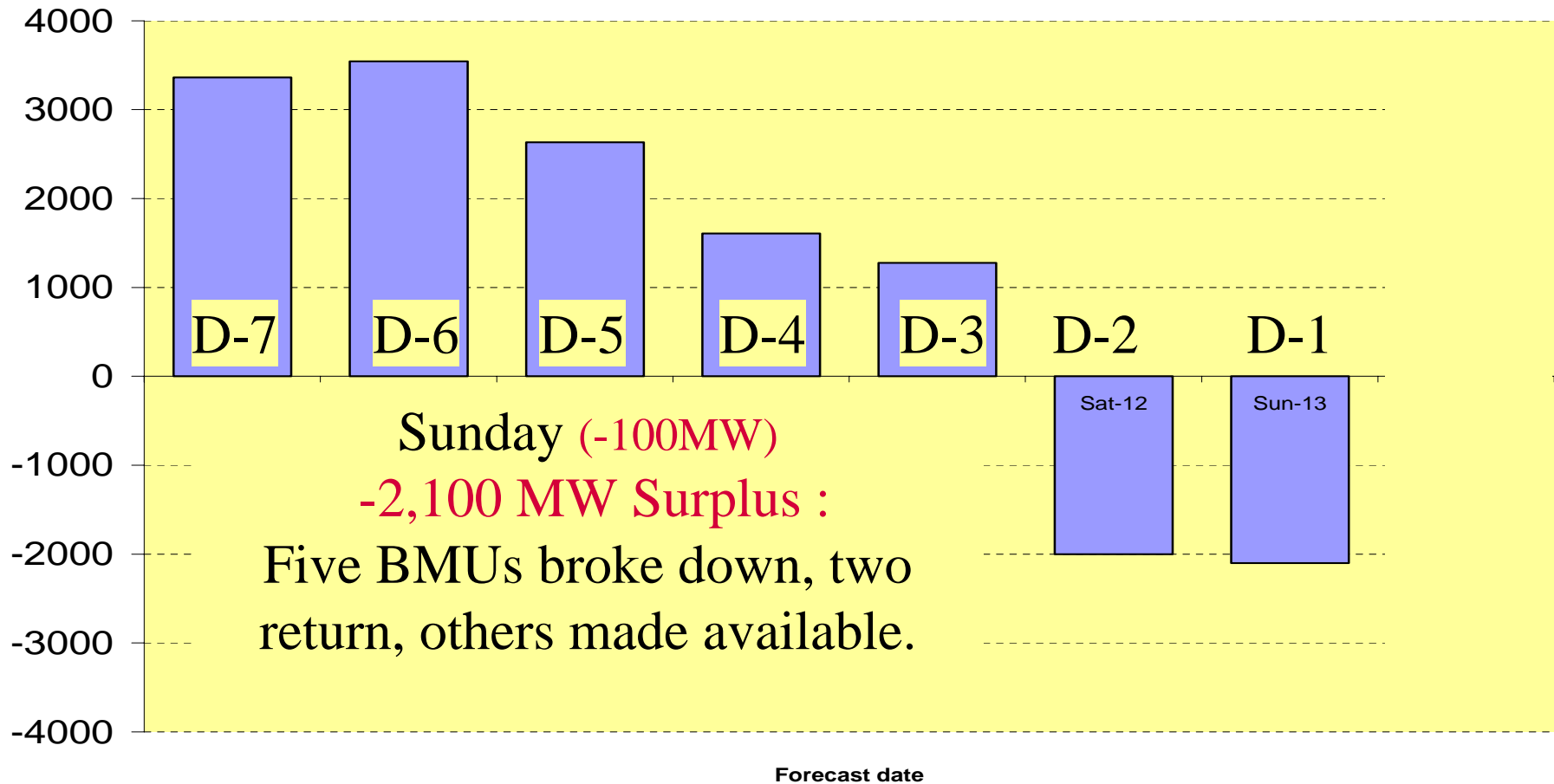
# Surplus on Monday 14th July - view during previous week



# Surplus on Monday 14th July - view during previous week



# Surplus on Monday 14th July - view during previous week



# NISM

- National Grid Issued a series of system warnings

- Notification of Insufficient System Margin

- Published on the BM Reports website

- Sunday 13th 15:07 hrs MEL shortfall of 2100MW

- Sunday 13th 22:00 hrs MEL shortfall of 2100MW

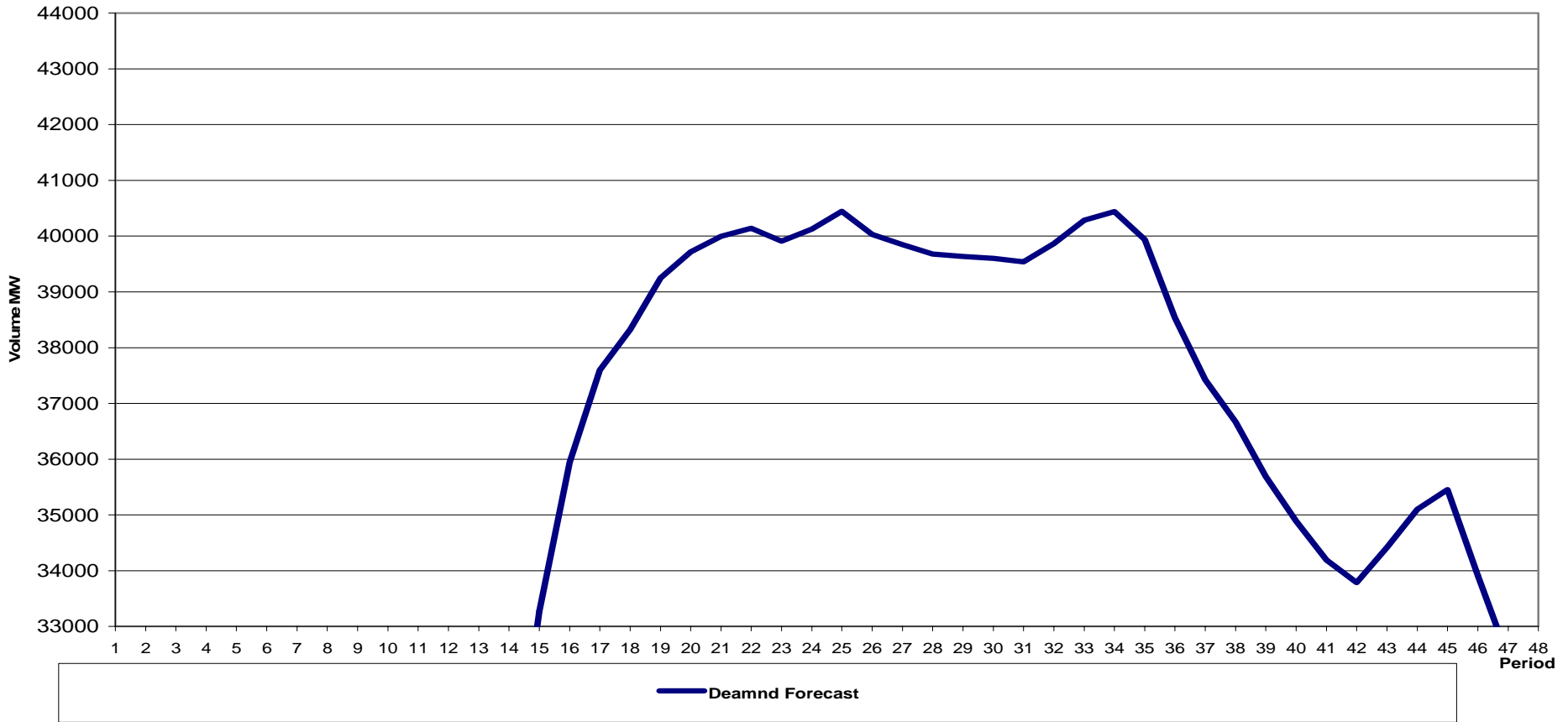
[National Grid Transco](#)



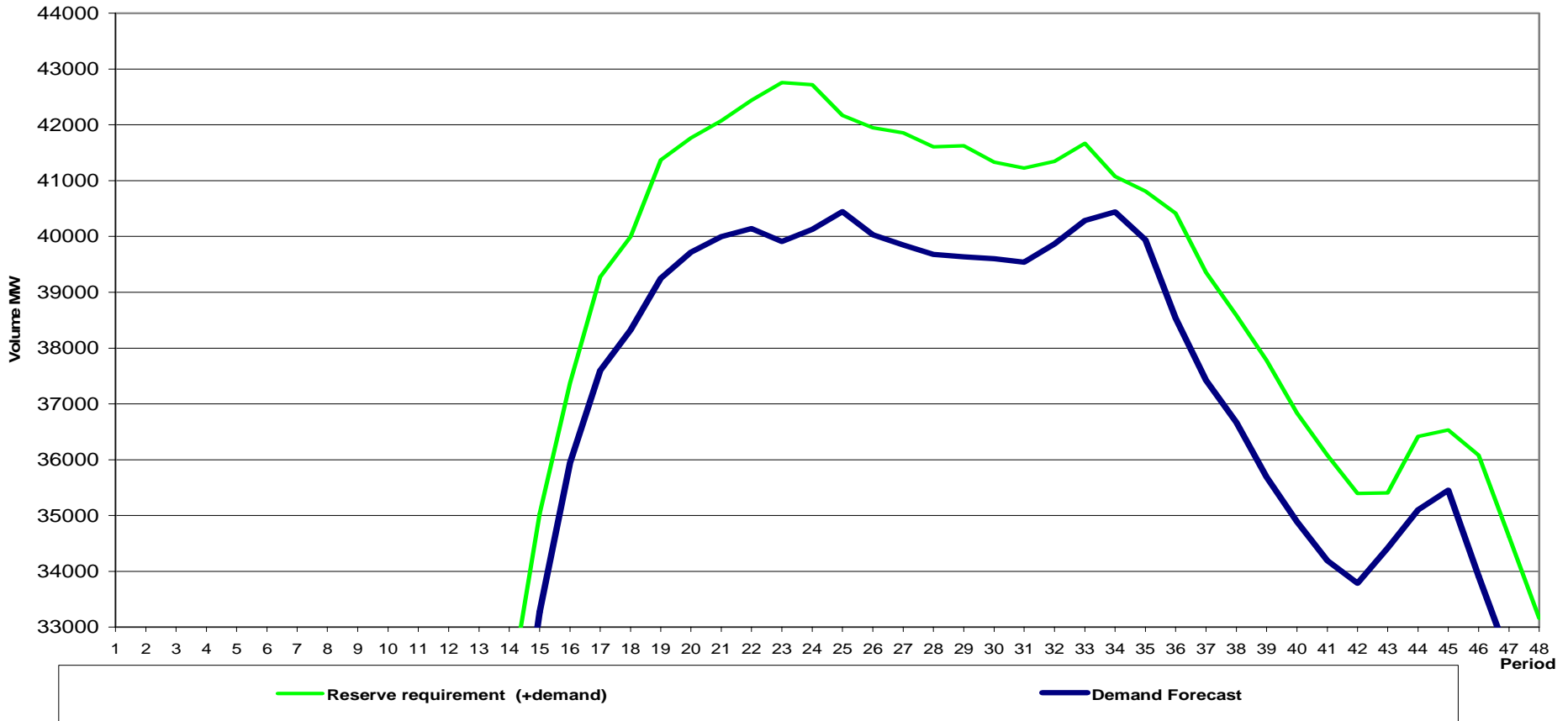
# So how did it look at 07:30 on Monday morning?

- Maximum Demand Forecast of 40,500 (a)
- Scheduled reserve requirement 2,800MW (b)
- Maximum output of planned plant 41,750MW (c)
- Shortfall of 1550MW to meet this requirement (a+b-c)

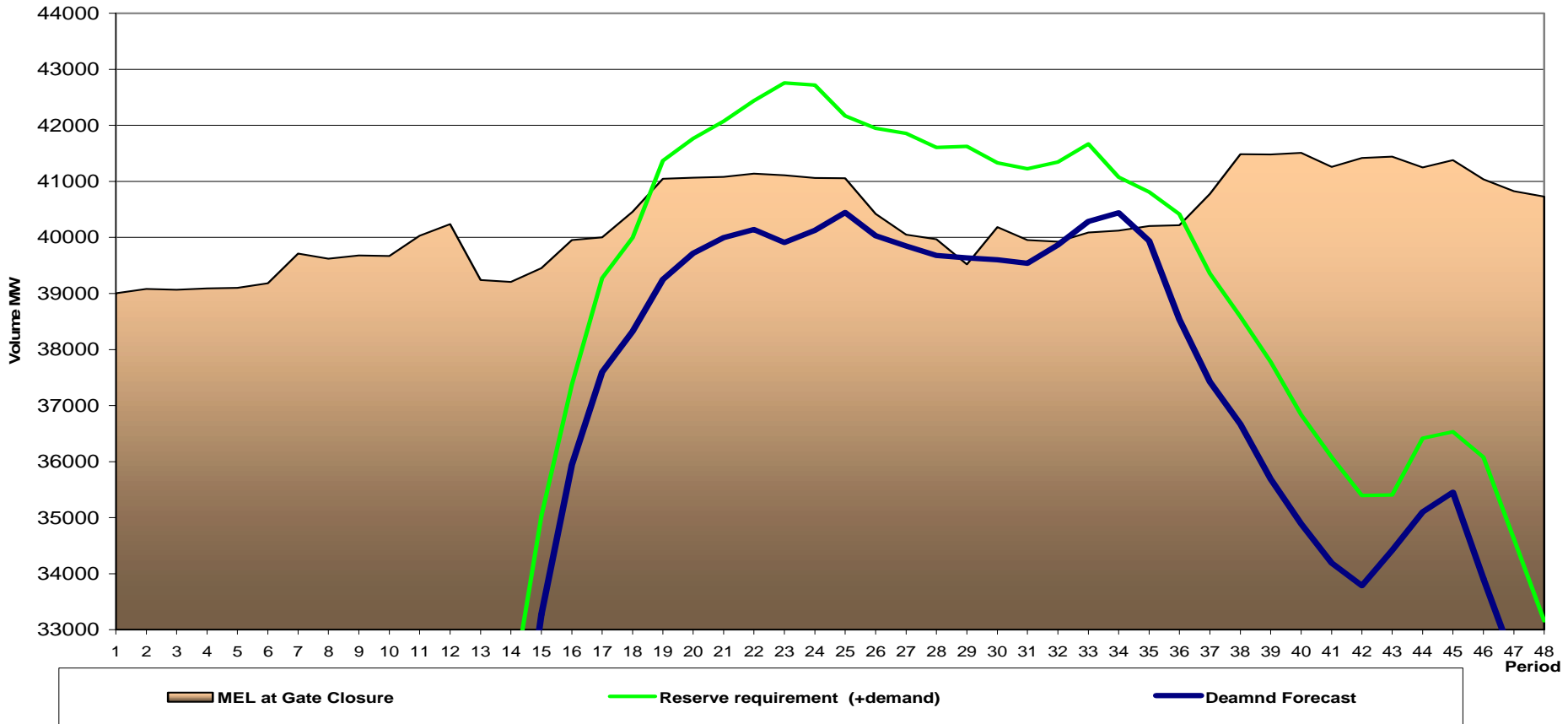
# Demand Forecast



# Reserve Requirement



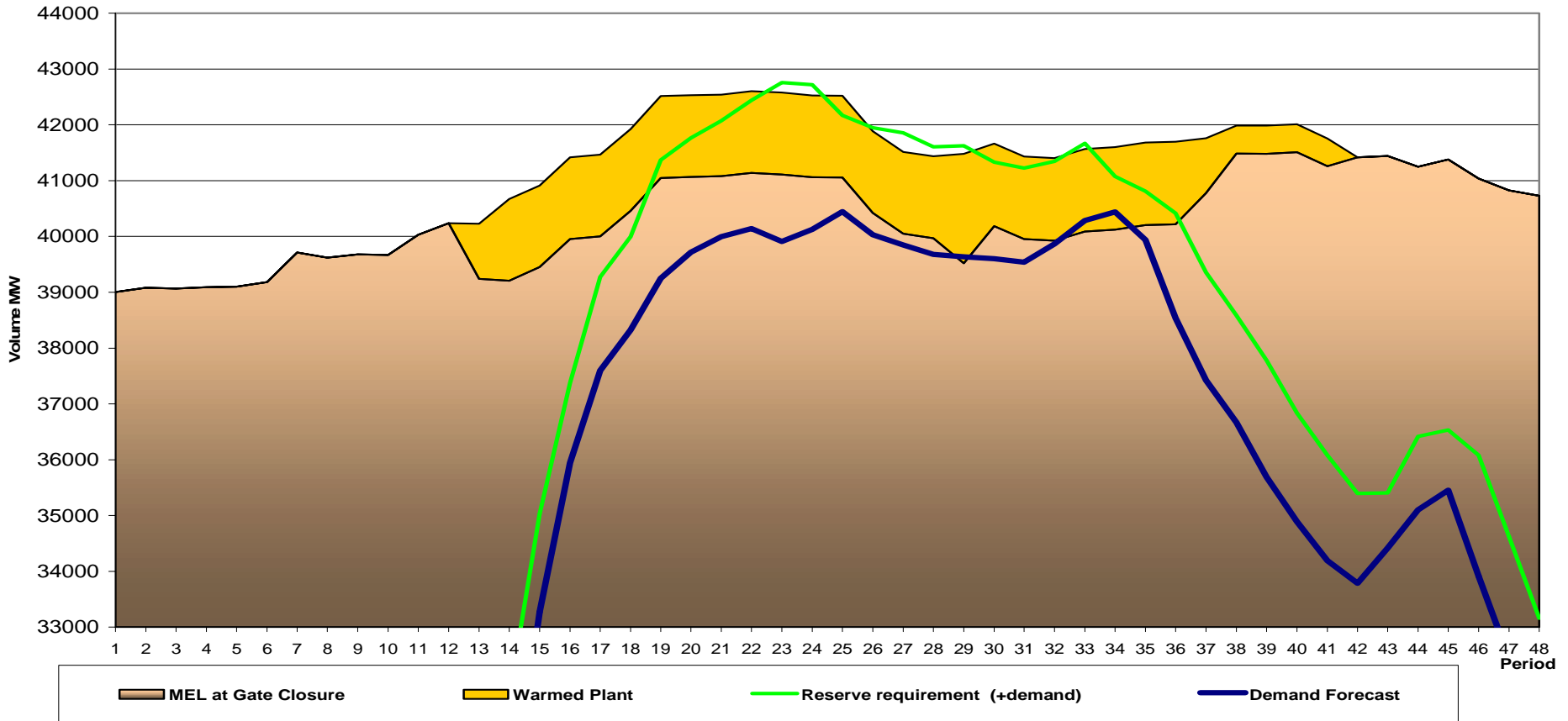
# Maximum Export Limit (MEL) at Gate Closure



# Warming

- NGT made four BM units, a total of 2100MW available in BM using warming contracts
- First 2 units warming at 17:30 on Sunday evening - 1180MW
- Third unit warming 23:57 Sunday
- Fourth unit warming 05:30 Monday
- Maximum plant now available in the BM

# Warmed Plant



# HRDR

- High risk of Demand reduction
- Four HRDR updates issued during Monday 14th
  - 05:30 1700MW
  - 08:30 1200MW
  - 11:00 1300MW
  - 16:00 1300MW

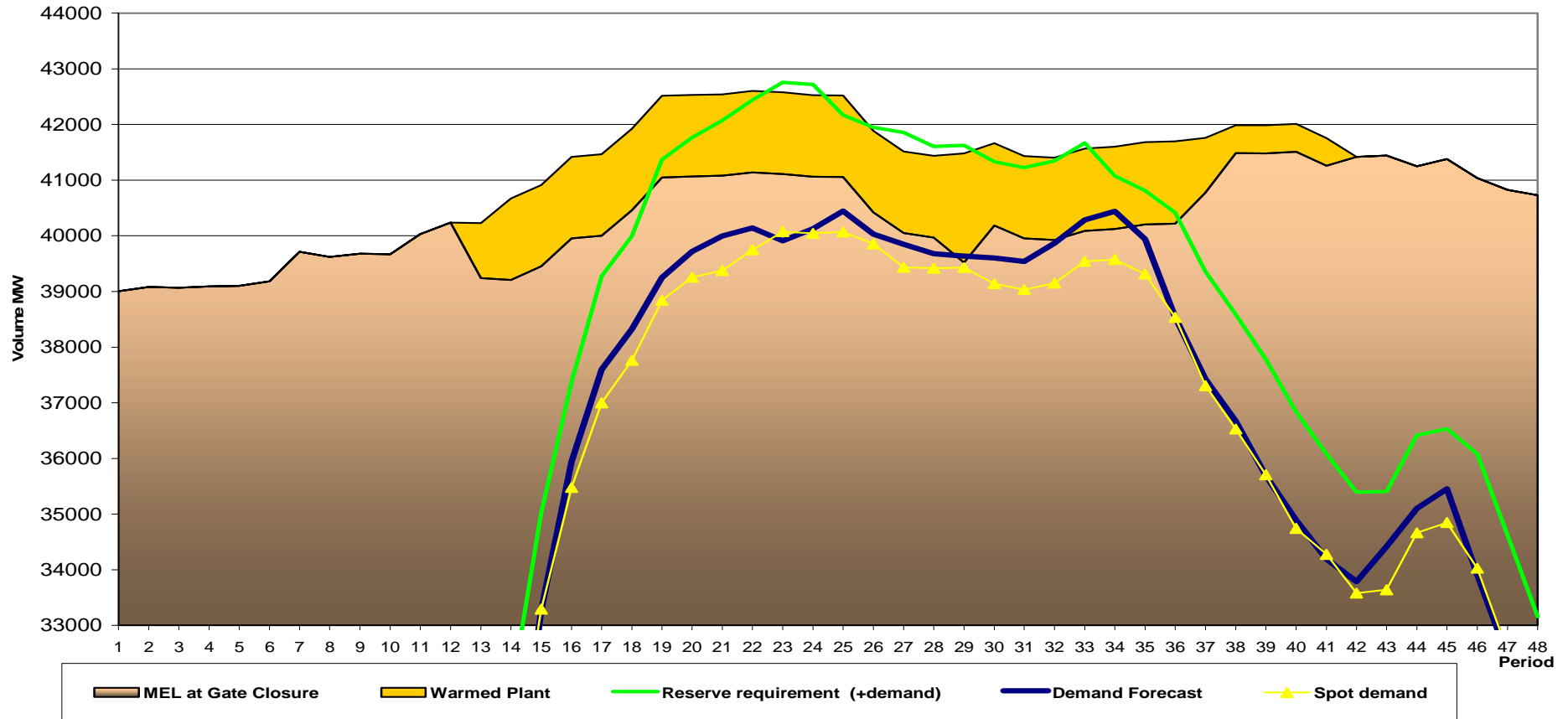
# Other actions

- In addition to the HRDR
- Liaison with DNOs control in case demand reduction required
- Individual stations were contacted / petitioned for extra plant
  - Resulted in 150MW becoming available
- Liaison with demand side

# Actual Demand

- Demand peaked at **40,100 MW** (incl.station demand)
- The normal demand level is **38,420 MW** (4.3% above seasonal norm)
- Reactive demand achieved highest ever summer levels  
22,500 MVA<sub>r</sub> which is **12%** above seasonal norm.

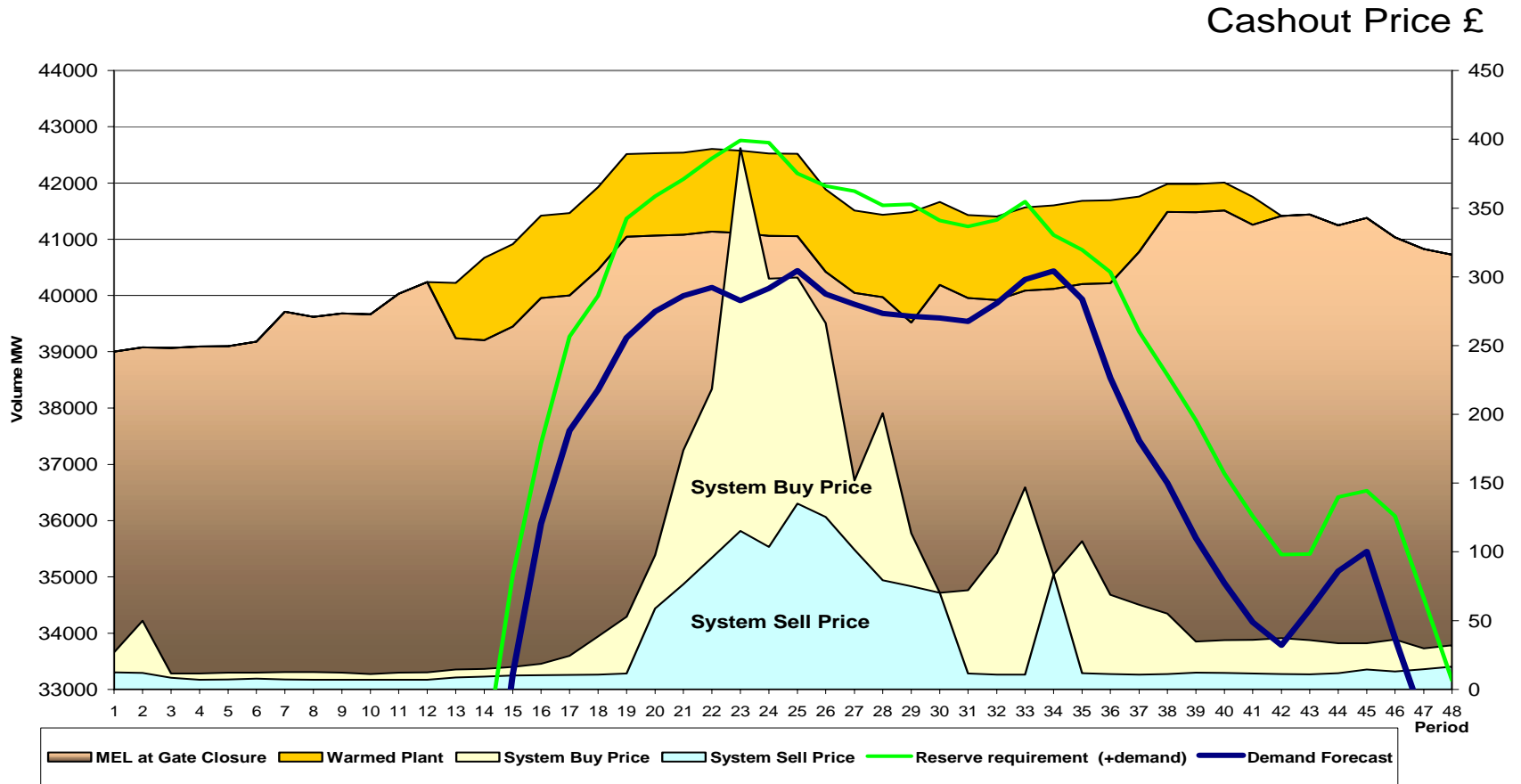
# Demand Outturn



# Cost

- The total cost of accepted bids & offers in the Balancing Mechanism was £2.637m
- £2.3m spend on maintaining sufficient operating margin.

# Cashout Prices Summary



# Summary Of NGT Actions

- Publication of margin data
- Issue of NISMs
- Warming Instructions
- Issue of HRDR and updates
- Contacting stations individually
- Follow up reports to DTI and OFGEM