

Winter Experience to Date

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National Grid Transco

UK Transmission

Agenda

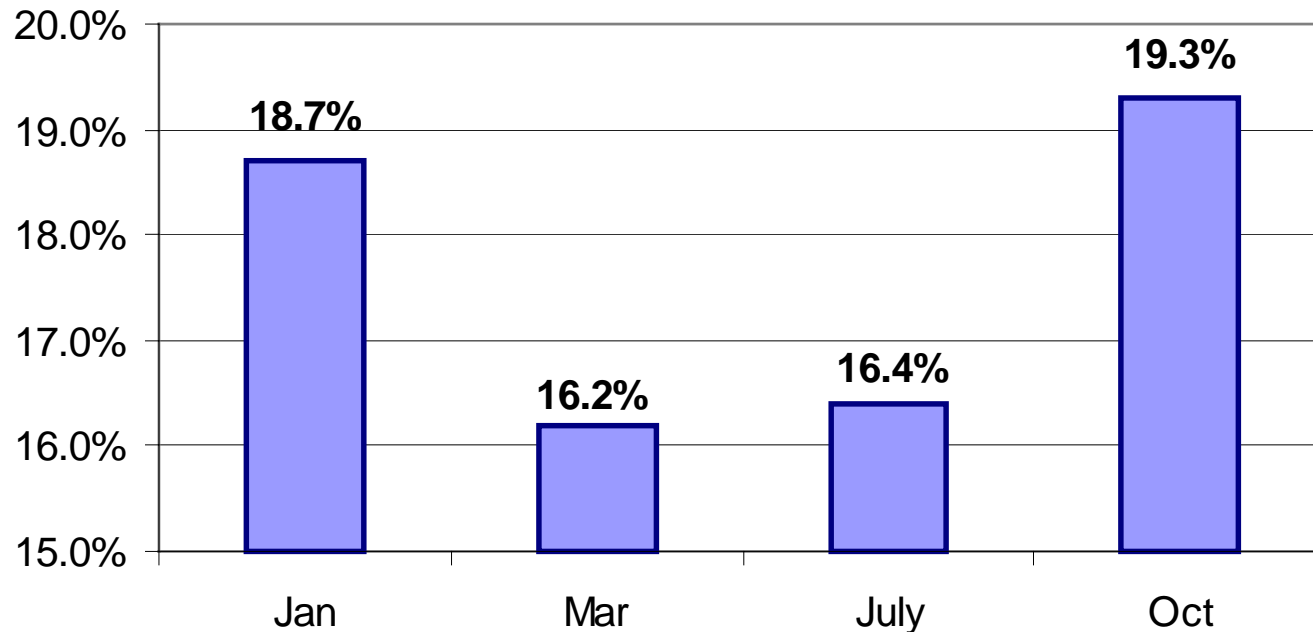
- Prelude to winter 03/04
 - margins
 - how did the uncertainties turn out?
- Experience during the winter period
 - weather
 - demand

Market Signals

Seven Year Statement Plant Margin

- 2003/04 SYS margin varied through the year
- Actual margin outturned at 21.6%

SYS Plant Margin 2003



Key uncertainties going into winter....

- Potential Upsides:
 - Further plant returning to service
 - BS Initiatives
 - Interconnector flows
- Potential Downsides
 - Interconnector flows
 - Commissioning plant performance?
 - Further mothballing / unavailability?
 - Gas interruptions?
- Weather

Generation availability

- The following mothballed plant returned (based on information on the BMRS)

Dinorwig 3	288MW
Grain 1	650MW
Dinorwig 2	288MW
Ffestiniog 3	90MW
Deeside	250MW
Fifoots 13 & 14	242MW
Killingholme PG	560MW
Grain 4	650MW
Tilbury GT	17MW

Plant Availability increased by 3035MW

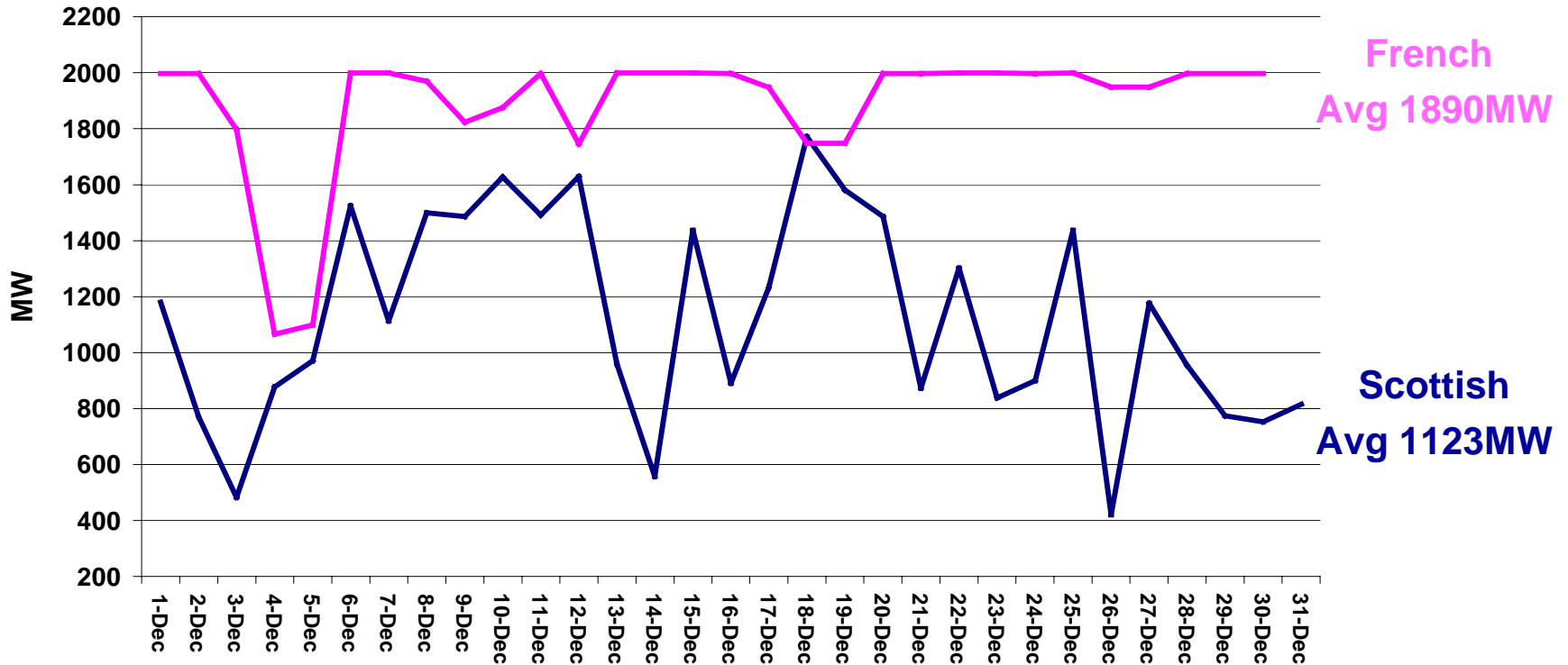
Balancing Services Initiatives

- Maximum Generation Service
 - circa 700MW (non-firm) emergency service contracted
 - service not yet been utilised
- Supplemental Standing Reserve
 - maximum of 850MW (firm) contracted

Up to 1550MW secured by Balancing Services Initiatives

Interconnector PNs at Demand Peak

Interconnector FPN Position @ Daily Peak Demand
December 2003



Average 3013MW import from Interconnectors

Other Factors

- Commissioning plant performance
 - Commissioning plant is included in OC2 and SYS margins
 - Not relied upon for operational purposes
 - Performance of commissioning plant has been good
- Long term plant breakdowns
 - October = 1500MW
 - December = 1230MW
 - Total breakdown 2730MW,
 - Total returned (during Jan 04, to date) 1350MW
- Short term plant failures were typical of a winter period
- No significant gas interruptions

Weather

- December 2003:

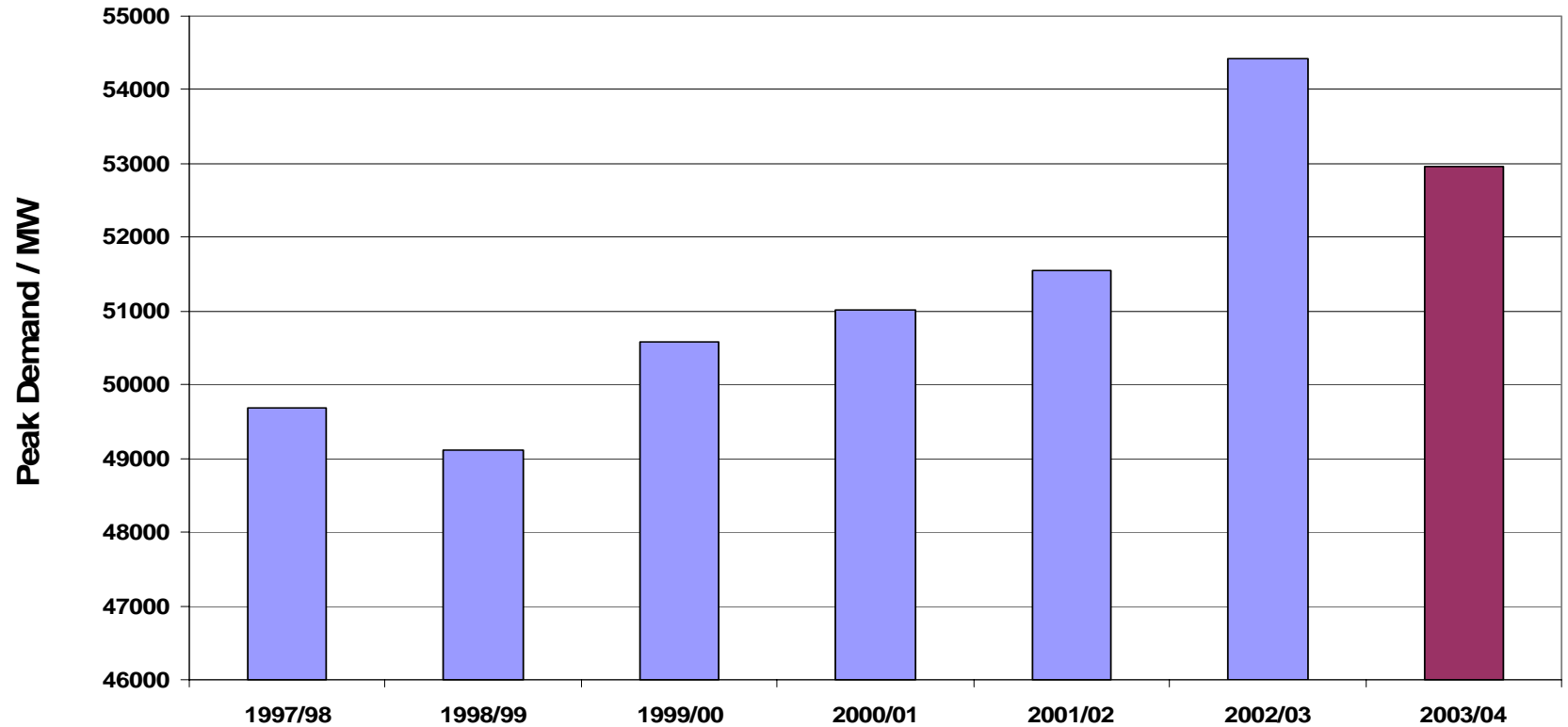
“A very changeable month across all parts. Most areas, except for Northern Ireland, experienced above average rainfall. Mean temperatures were slightly above average across the UK, with most eastern areas having above average sunshine.”

- January 2004:

“Another mild month. Rainfall was above average, particularly in the east. The best of the sunshine was in the south and east, with the north-west having below average amounts.”

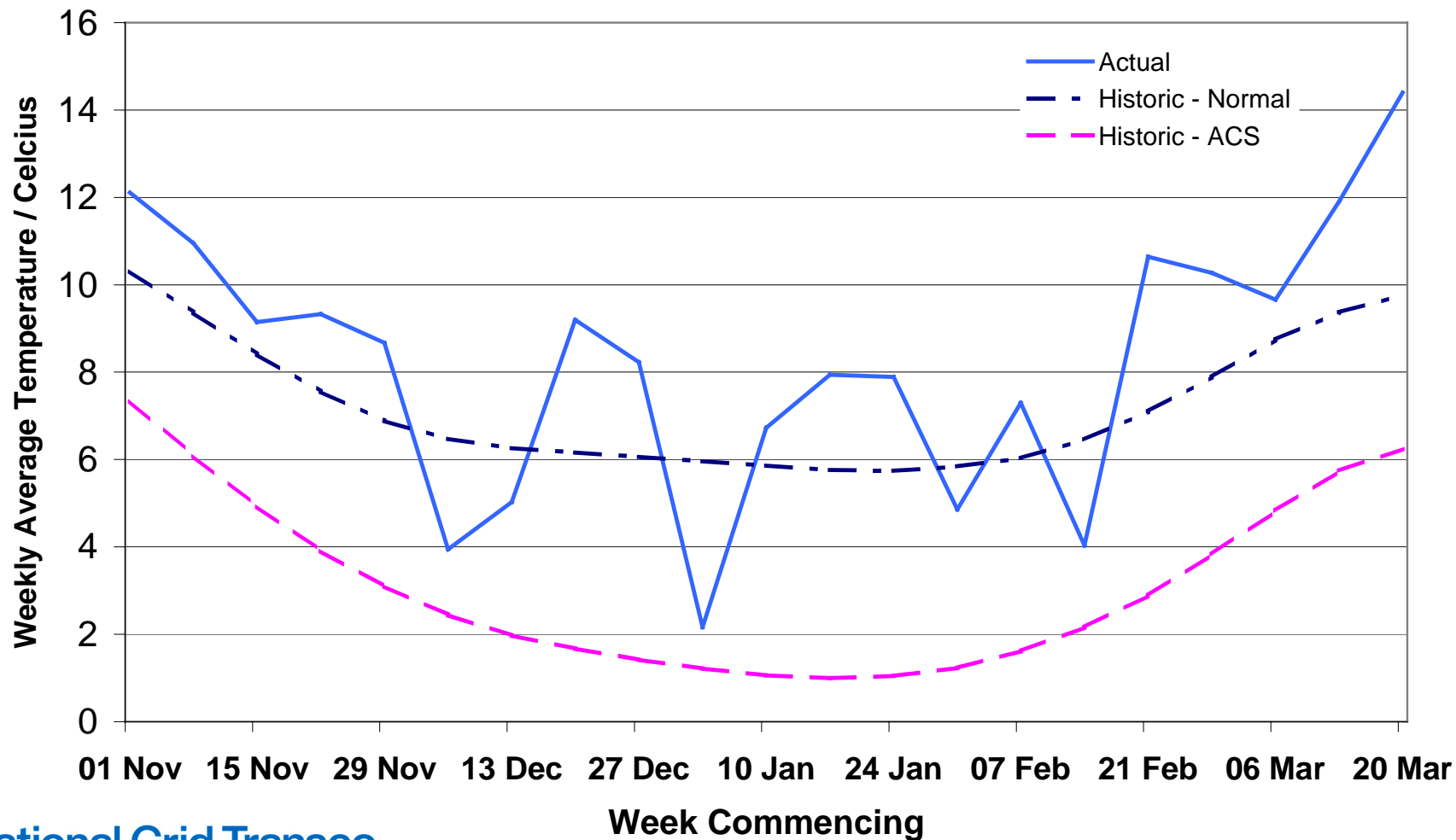
Peak Demand

Actual Peak Electricity Demand in England & Wales



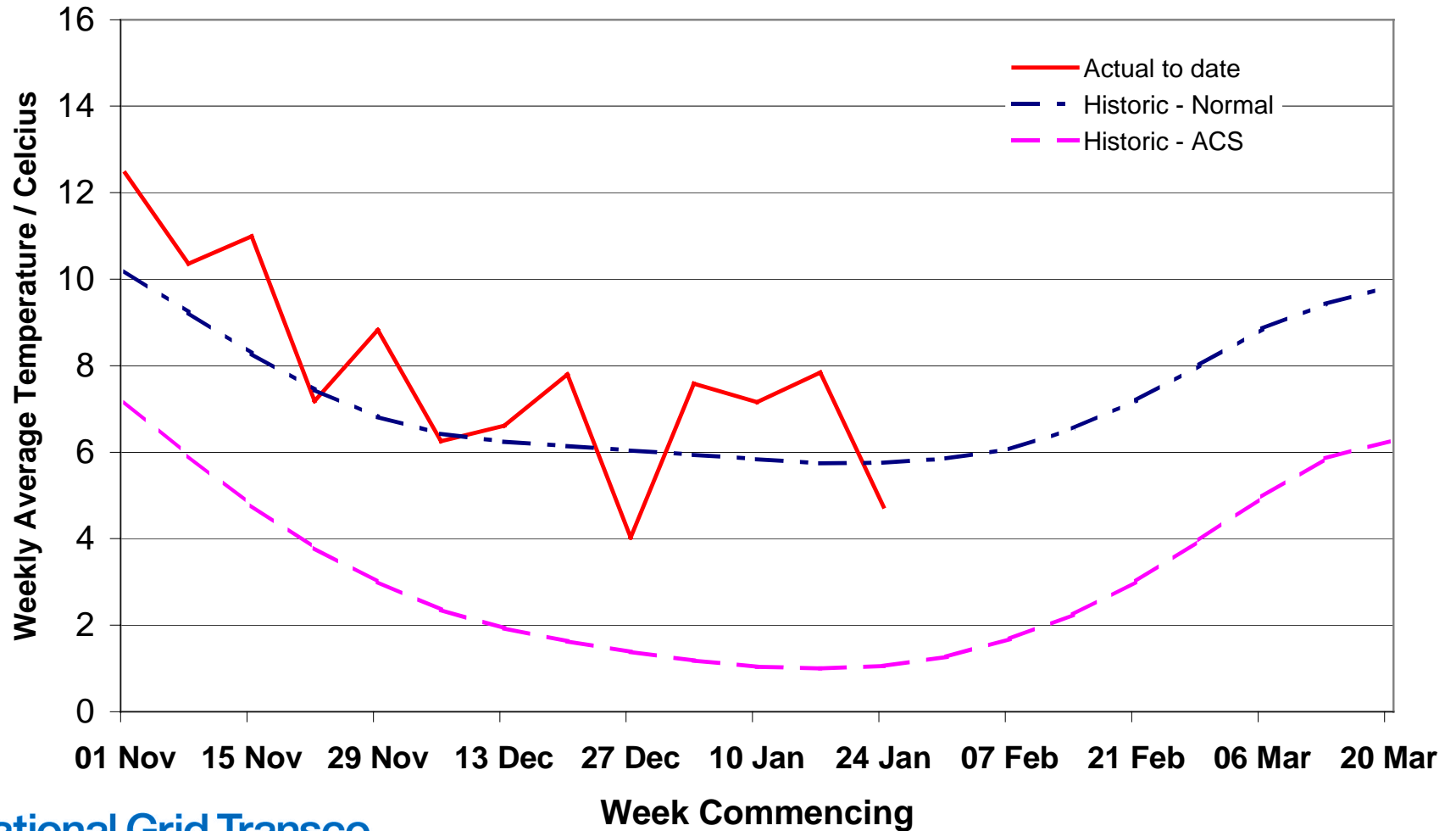
Last winter

Temperatures - Winter 02/03



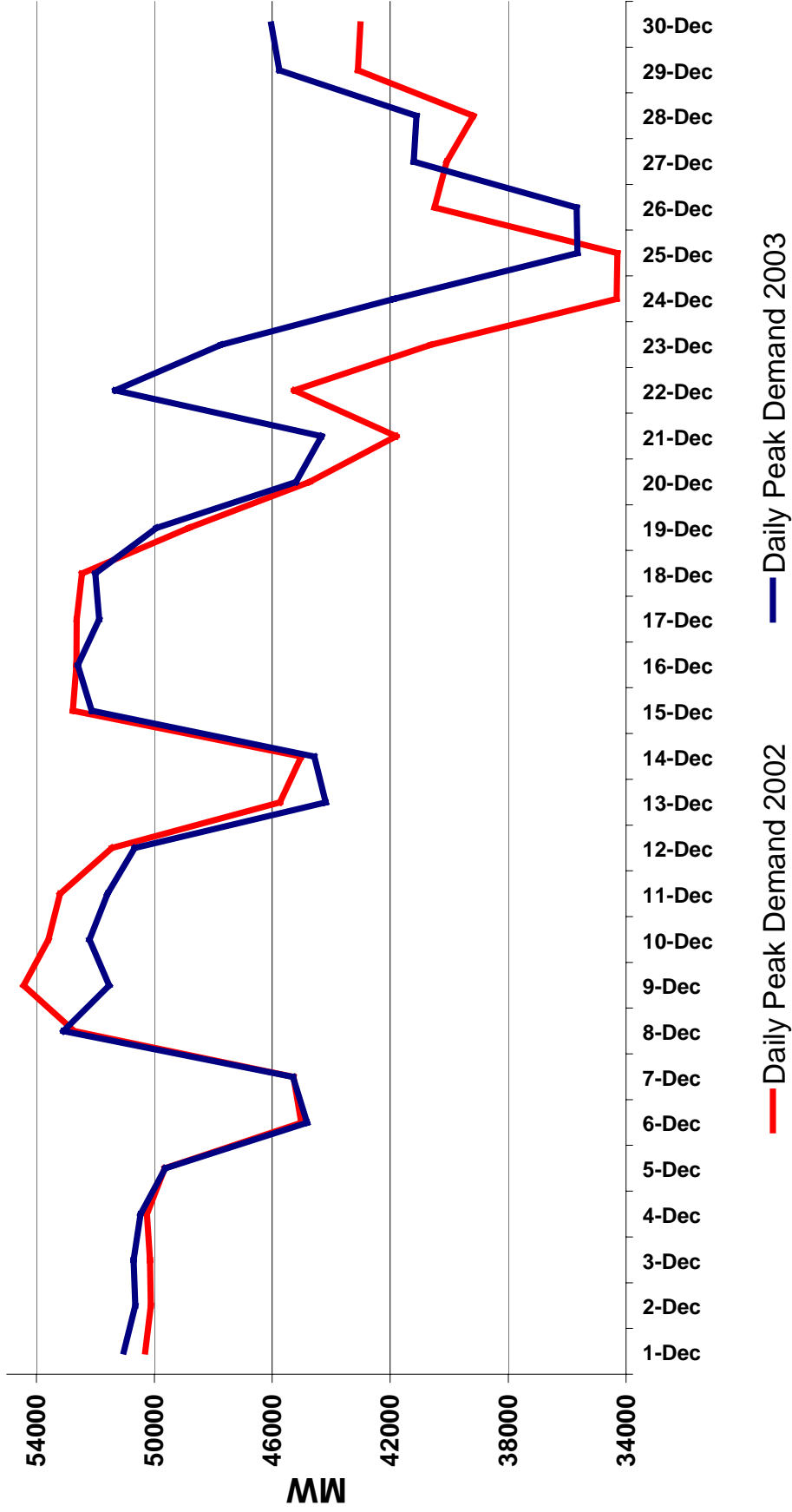
This winter

Temperatures - Winter 03/04



Effect on Demand

Daily Peak Demand Outturn December 2002 v 2003
Adjusted For Weekend Offset



Peak Demand and Temperature

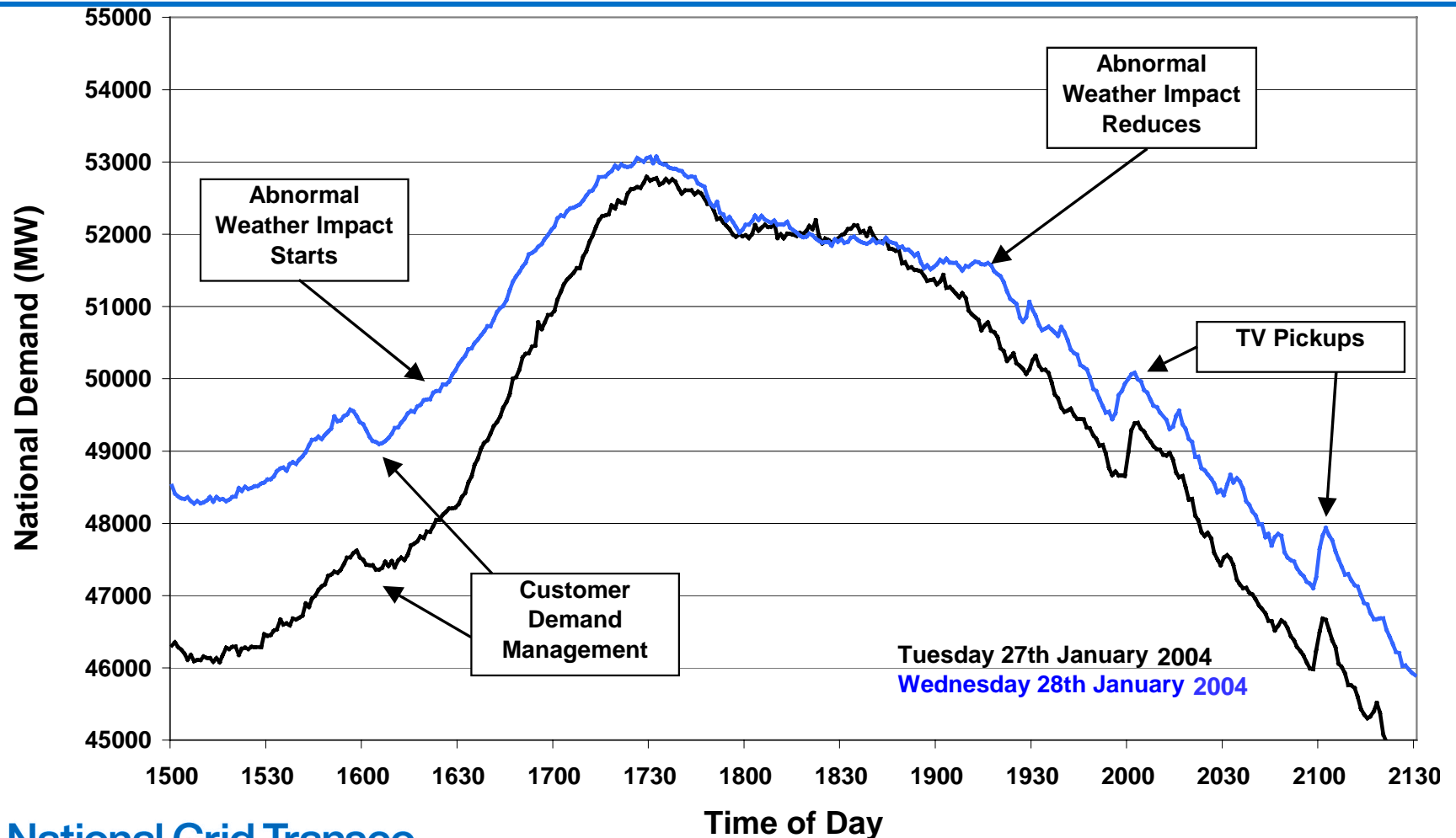
- December 2002
 - maximum demand 54.8GW on 10/12/02
 - temperature at peak 2⁰C
- December 2003
 - maximum demand 53GW on 8/12/02
 - temperature at peak 8⁰C

Last Week in January 2004



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Wednesday 28th January Demand Profile

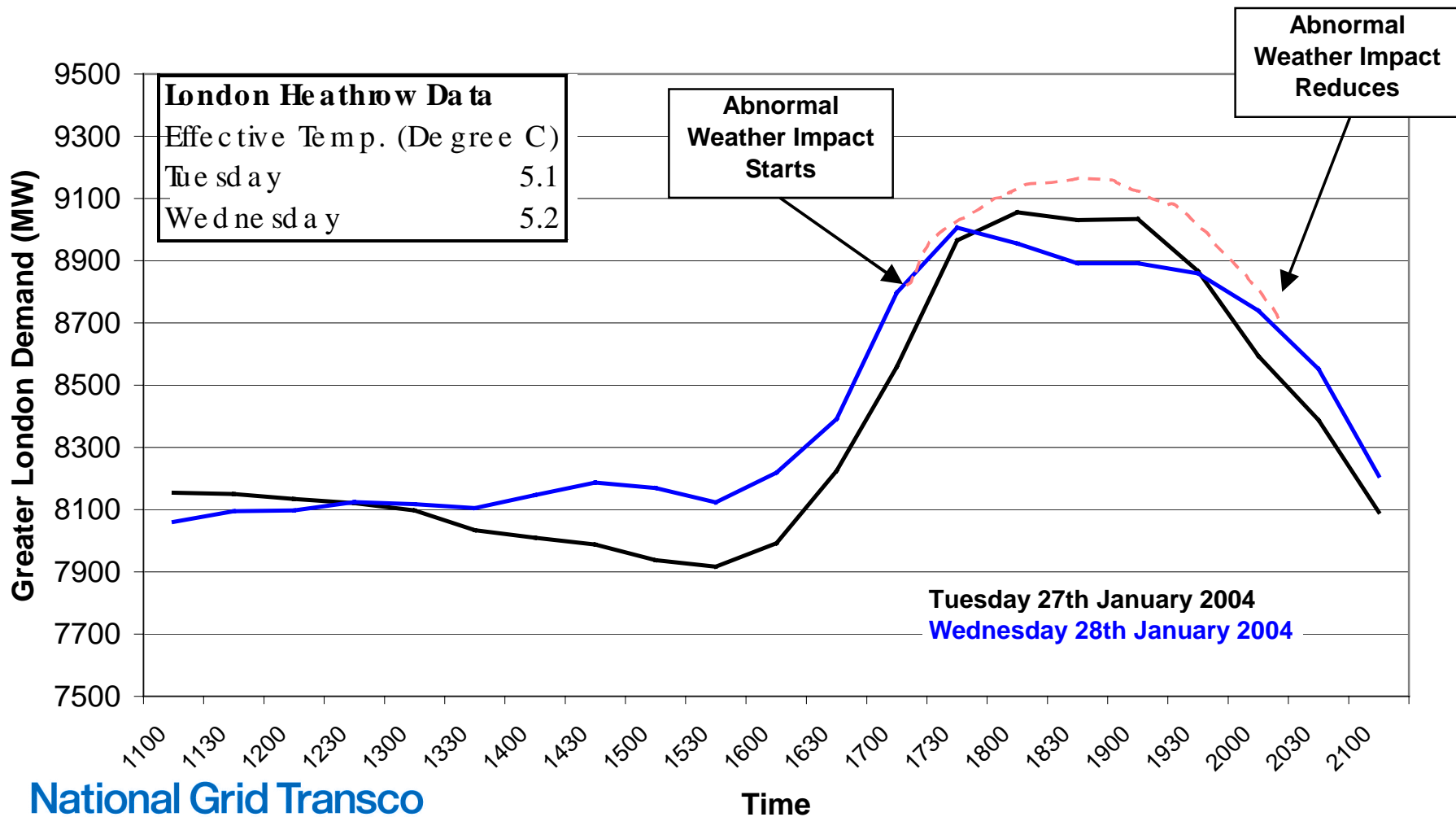


28 January 2004

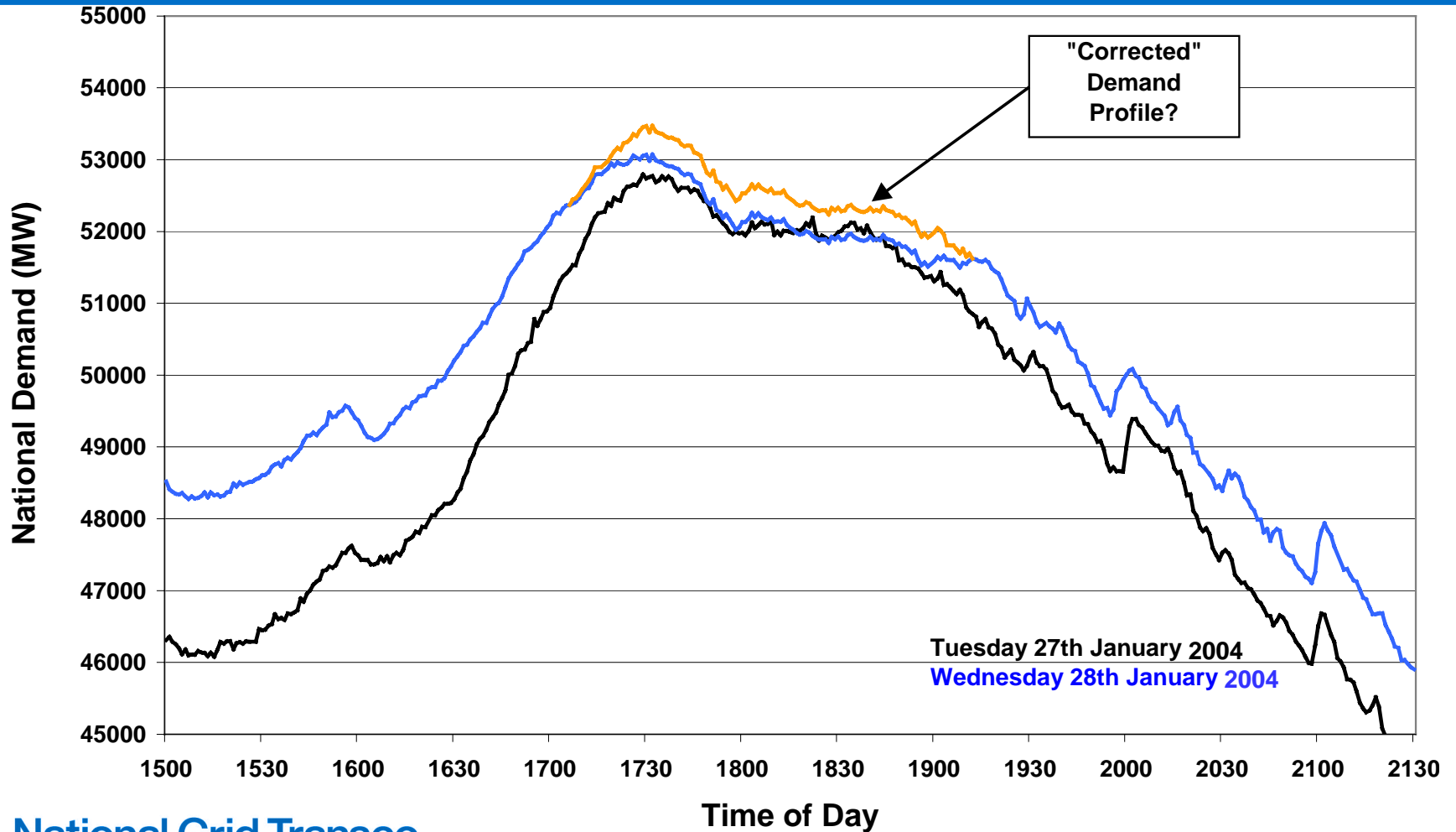


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Greater London Demand Wednesday 28th January 2004



Corrected Demand Profile



Summary of last week

- Usually bad weather causes an increase in demand
- Bad weather caused disruptions across the country
- Disruptions affect people's routines
- Usual "Darkness Peak" demand on Wednesday was spread over a longer period so peak was lower than it could have been.
- "Cold snap" only lasted a couple of days

Summary of this Winter to date...

- Upsides outdid the downsides
- Weather was kind in December
- Bad weather last week caused disruption rather than high demands and wasn't sustained
- Still analysing the winter experience. Potential increase in:
 - Customer Demand Management
 - Embedded Generation